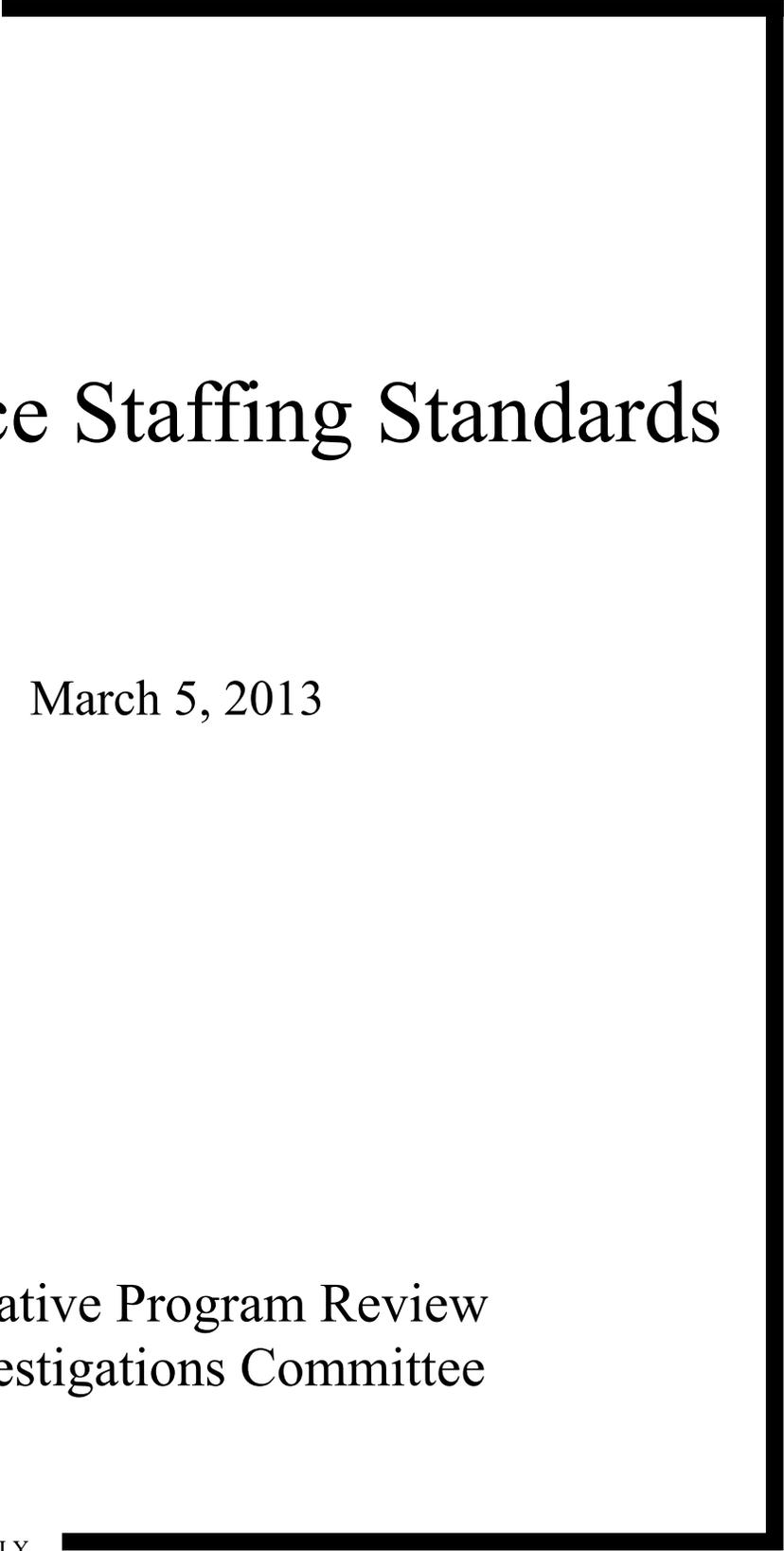


Staff Report



State Police Staffing Standards

March 5, 2013

Legislative Program Review
& Investigations Committee

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INTRODUCTION

Public Act 12-1 (June 12 Special Session)¹ eliminated the statutory provision that the Department of Emergency Services and Public Protection (DESPP) maintain a minimum sworn personnel staffing level of 1,248 members. The public act replaced the language specifying the statutory minimum number of personnel by requiring the DESPP commissioner, beginning July 1, 2013, to “appoint and maintain a sufficient number of sworn state police personnel to efficiently maintain the operation of the division as determined by the commissioner in accordance with the recommended standards developed” via this PRI study.²

The PRI committee was charged by the Act with developing standards to recommend for use by the DESPP commissioner in determining the proposed level of staffing for the Division of State Police. The Act directed the committee to consider the following in developing these recommended standards:

- Technological improvements
- Federal mandates and funding
- Statistical data on rates and types of criminal activities
- Staffing of patrol positions
- Staffing of positions within the division and department that do not require the exercise of police powers
- Changes in municipal police policy and staffing; and
- Other criteria as PRI deems relevant

SCOPE OF STUDY

In late June 2012, the program review committee approved its study scope to develop recommended state police staffing standards. In accordance with the public act, the program review committee focused its analysis on the following areas:

- Describe the major roles and responsibilities of Connecticut State Police (CSP)
- Review relevant literature for police staffing best practices, other research studies, and recommendations by accrediting bodies and professional associations
- Assess technological improvements that have occurred and their potential impact on state police staffing
- Identify any relevant federal mandates or funding requirements
- Analyze trends in rates and types of criminal activity for their association with state police staffing levels
- Examine trends in the staffing of state police patrol positions

¹ Public Act No. 12-1 June 12 Special Session, AN ACT IMPLEMENTING PROVISIONS OF THE STATE BUDGET FOR THE FISCAL YEAR BEGINNING JULY 1, 2012, Section 243.

² As used in this study, a standard is an established requirement.

- associated trends in number of calls for service and response times
- use of overtime
- Assess which state police division responsibilities require sworn officers as opposed to civilian employees, with consideration of public and police safety
- Changes in municipal police policy and staffing that impact state police resources

METHODOLOGY

The goal of the Connecticut State Police is to keep the public and troopers³ safe. Determining how many CSP sworn staff are required should be driven by how public and trooper safety is benefitted or harmed by changes in staffing levels. This study approach made the following assumptions about public and trooper safety:

The public is safer when CSP:

- responds to emergency 9-1-1 calls within an acceptable amount of time;
- deters crimes from being committed;
- solves crimes when they are committed;
- promotes highway safety so that fatal and other accidents with injuries are kept to a minimum; and
- satisfies service expectations held by the citizenry of Connecticut.

Troopers need to provide these services while maintaining personal safety. Indicators of trooper safety include the number of:

- accidents in police cruisers;
- assaults on officers; and
- workers' compensation cases (i.e., injuries on the job).

Each of these measures of public and trooper safety was assessed for association with staffing level. The theory behind this assessment was that if a relationship was found between any measure and staffing numbers, that would provide an objective piece of information on which to base staffing decisions, i.e., to develop a standard. The study was guided by the following questions:

- Did CSP take longer to respond to 9-1-1 calls when there were fewer officers available?
- Did crime rates decrease when more officers were available?
- Were crimes more likely to be solved when staffing levels were higher?
- Did fatal accidents and non-fatal accidents with injuries increase when trooper levels decreased?
- Was citizen satisfaction with CSP services lower when staffing levels were lower?

³ "Trooper" is used generally to refer to all CSP sworn personnel

- Were troopers more likely to be in accidents, assaulted, and otherwise injured on the job when staffing levels were lower?

Based on the answers to these questions, possible staffing level standards were identified. If there was an association between a public/trooper safety measure and staffing level, PRI staff considered the area conducive to a standard for determining appropriate staffing level for CSP. Conversely, if no association was found between a public/trooper safety measure and staffing levels, the area was not considered as a potential staffing level standard.

During the course of the study, six additional public and trooper safety related areas were identified as potential staffing level standards for CSP.

The public is safer when:

- Functions explicitly stated in statute are provided by CSP;
- CSP fully meets contractual obligations to towns to provide resident state troopers;
- There is an adequate number of troopers to staff the 230 patrols, taking into consideration the shift relief factor; and
- Patrol and resident state trooper supervision is sufficient based on a 1:8 span of control.

Troopers are safer when:

- The two-officer minimum requirement for domestic violence, fatal accidents and untimely death/homicide calls for service are being met [at least 90% of the time]; and
- The use of regular duty overtime has not been steadily increasing [three years in a row].

The primary time period examined was FY 09 to FY 12. These fiscal years had the most complete information from the available sources used to analyze the potential relationship between staffing levels and cited measures. As noted throughout this report, higher staffing levels occurred in FY 09 and lower staffing levels in FY 12. For some analyses, monthly rather than annual staffing data was used to determine how fluctuations within a given year may have related to the public and trooper safety related measures.

Depending on the factor examined, variability in staffing levels could occur across the individual Troops. In such instances, additional analyses were performed contrasting the individual Troop findings. Sworn personnel and civilians assigned to specialized units were also examined.

For some analyses, the position in which a trooper worked was considered. For example, patrol troopers and resident state troopers were considered for certain response time analyses, and rank, such as the number of sergeants, was also considered for span of control analyses.

SOURCES OF INFORMATION

Many different sources of information were used to analyze the potential relationship between staffing levels and the public and trooper safety related measures. Information was collected and analyzed from a variety of sources both within and outside of DESPP. The data sources used were:

1) CORE-CT

Data for staffing levels was taken primarily from CORE-CT, the state information system containing employee information on positions, time and attendance, leave and light duty status, overtime, rank, and years of service. Monthly data was collected for the time period from July 2008 through June 2012 for most of the staffing analyses. The number of sworn personnel varies from month to month. Depending on which month is chosen, the annual trend in the number of CSP sworn personnel differs.

Given this variability, PRI adopted a methodology for this study of using the average of the monthly staffing levels to represent staffing levels for the fiscal year. PRI staff also found a difference between the number of sworn personnel assigned to and the number active in a position. Sworn personnel may not be active in an assigned position due to:

- Military leave;
- Workers' compensation leave;
- Family medical leave (FMLA); or
- Other leave.

Sworn personnel may also not be active in an assigned position due to injuries that occurred either on or off the job, and require an assignment to "light duty." For many of the analyses, PRI only included the active, non-light duty, sworn personnel available to perform their jobs.

2) Computer Aided Dispatch (CAD)/Record Management System (RMS)

Detailed information from CAD/RMS was provided to PRI. The approximately 2.7 million calls for service analyzed included information to calculate response times, numbers of calls for service for different types of incidents, and number of officers responding to certain types of calls for service that require at least two officers.

3) Uniform Crime Reporting Data

The CSP Crimes Analysis Unit provided PRI staff with information on criminal offenses, arrests and clearance rates in Connecticut (Uniform Crime Report data) that is subsequently provided to the Federal Bureau of Investigations for national crime counts. Offenses are divided into Crime Index Offenses (the most serious), other Group A offenses (more serious), and Group B offenses (less serious). Annual data on the number of assaults on Connecticut State Police officers was also provided for calendar years 2007 through 2011.

4) 9-1-1 Call Data

The DESPP Office of Statewide Emergency Telecommunications (OSET) maintains statistics on the number of 9-1-1 calls received by CSP Public Safety Answering Points (PSAPs) located in Troops A, B, E, G, H, I, L and W. Quarterly information for the period of July 2008 to June 2012 was provided to PRI staff on the number of 9-1-1 calls received, amount of time before call was answered, number of calls transferred to local police departments, and the number of abandoned calls (i.e., no one on the line when call was answered by dispatch operator).

5) Citizen Complaints and Commendations Data

The Internal Affairs Unit, within the Bureau of Professional Standards and Compliance, provided information on the number of incidences of complaints and commendations, type of investigation by the Internal Affairs Unit, and results of any inquiries and investigations.

6) Department Accident Records

The Bureau of Professional Standards and Compliance provided information on 370 department police cruiser accidents that occurred from January 1, 2011, through October 31, 2012. Information included date of accident, rank of sworn personnel, Troop/Unit assignment of sworn personnel, whether vehicle was occupied at the time of the accident, whether the sworn personnel was on duty or off duty at the time of the accident, and whether the sworn personnel was injured in the accident.

7) Traffic Ticket Data

The Centralized Infractions Bureau within the Judicial Department provided PRI staff with state police ticket data including the number of tickets issued statewide and by individual troop for fiscal years 2009 through 2012.

8) Budget and Overtime Information

Budgetary and overtime information was provided to PRI staff from the CSP human resources and overtime unit offices, DESPP Fiscal Services Unit, the Legislative Office of Fiscal Analysis, and the Office of Policy and Management.

9) Interviews and Visits with CSP Personnel

PRI staff interviewed personnel from the following areas within CSP:

- Commissioner's Office
- Office of Field Operations
- Crimes Analysis Unit
- Human Resources
- Payroll
- Sex Offender Registry
- Accreditation Unit
- Police Officer Training Academy
- Fire and Explosion Investigation Unit
- Office of Statewide Emergency Telecommunications (OSET)
- Bureau of Criminal

- Overtime Unit
- Fiscal Services Unit
- Major Crimes Unit
- Emergency Services Unit
- Traffic Services Unit
- Special Licensing and Firearms Unit
- Research and Information Services
- CAD/RMS
- Investigations
- Computer Crimes
- Fingerprinting Unit
- Polygraph Unit

Committee staff also met with the following external stakeholders: Connecticut State Police Union; Office of State Comptroller Retirement Division; Department of Transportation/Highway Construction; Connecticut Police Chiefs Association; and NexGen, the vendor working with the CAD/RMS unit. Testimony from the committee’s public hearing was received from the DESPP commissioner, the Connecticut State Police Union, and the Council of Small Towns. Committee staff also contacted Connecticut Conference of Municipalities and the Council of Small Towns for meetings, which did not transpire.

Program review committee staff visited all 11 CSP Troops and had discussions with district command officers and participated in various “ride-alongs” with troopers. The visits and ride-alongs were made to gain a better understanding of troop operations, troop characteristics, and the patrol function. PRI staff also reviewed preliminary analyses with CSP personnel to obtain their interpretation and possible explanation of findings.

10) Other States

PRI staff contacted several other states for basic information, including New England states, Maryland, and Alaska. Information was primarily obtained for service-coordination between state police and municipalities and the level of civilianization of certain functions.

11) Literature Review

Committee staff reviewed research studies from other states, material from professional associations, including the Commission on Accreditation for Law Enforcement Agencies (CALEA), the International Association of Chiefs of Police (IACP), the Association of Public Safety Communications Officials (APCO), National Highway Traffic Safety Administration (NHTSA), the Bureau of Justice Statistics (a function of the Office of Justice Programs within the United States Department of Justice), and other national associations. Earlier CSP staffing allocation studies were also examined.

Study Limitations

Although every effort was made to comprehensively study public and trooper safety and staffing levels, there were also a number of study limitations. The manner in which information was captured within some of the data systems, for example, was sometimes limited. PRI staff was unable to identify accidents involving intoxicated drivers, types of tickets written, and response time for resident state troopers vs. patrol troopers. Although staffing levels were compiled by month, some information was only available on a quarterly or annual basis.

Limited analyses were conducted to assess the roles intervening factors played in public/trooper safety and staffing levels including geography/topography, population density, budget, weather, presence of municipal constables and police departments, and CSP policies/goals.

REPORT

As highlighted in the Table of Contents, this report is divided into 16 chapters, followed by several appendices. Most of the chapters relate to individual factors examined by committee staff during this study.

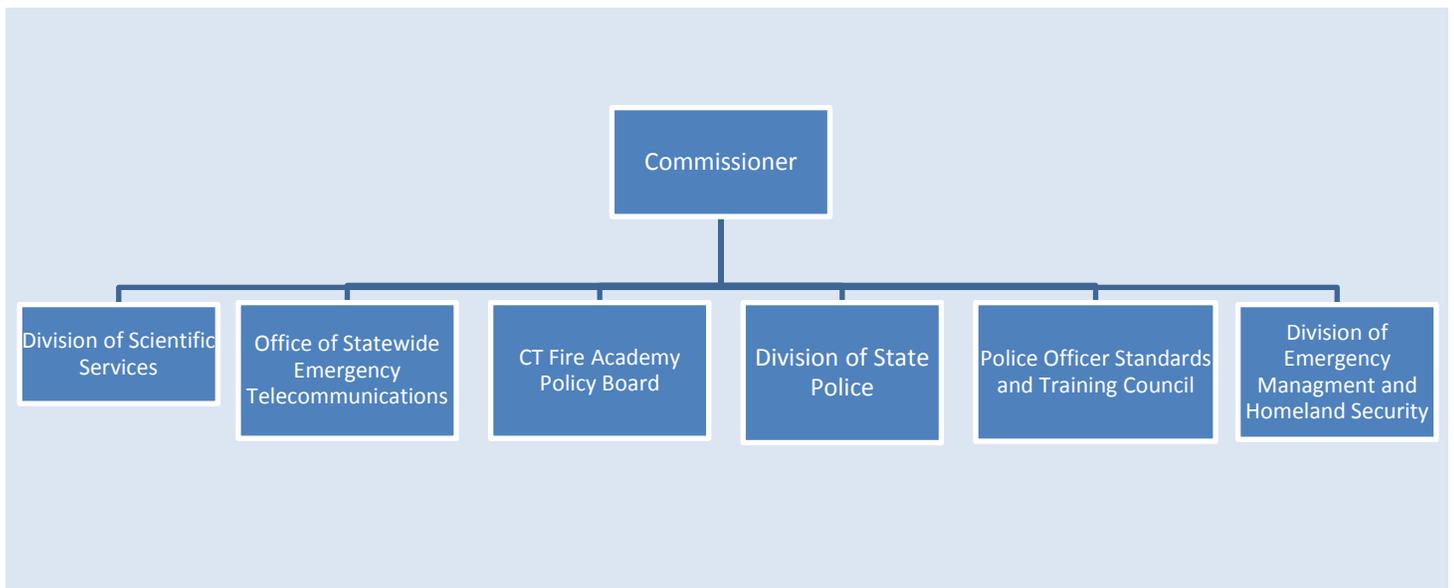
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Background

In 2011, Public Act 11-51 established the Department of Emergency Services (DESPP), formerly known as the Department of Public Safety. In addition to a name change, the legislation added new responsibilities to the department and transferred some functions to other agencies. Some of the transferred functions included the responsibility for and the operation of weigh stations to the Department of Motor Vehicles and the transfer of state building inspector and fire marshal offices (not including the responsibility of fire investigations) to the newly created Department of Construction Services.

Prior to the merger, the Department of Public Safety consisted of three divisions: State Police; Scientific Services; and Fire, Emergency, and Building Services. As shown in Figure II-1, DESPP currently is comprised of six core areas: Division of Scientific Services; Division of Statewide Emergency Telecommunications; Commission on Fire Prevention and Control/CT Fire Academy; Division of State Police; Police Officer Standards and Training Council (POST); and the Division of Emergency Management and Homeland Security. There are several other supportive functions and offices not shown in the figure which contribute to the operations of the department.⁴

Figure II-1. Department of Emergency Services and Public Protection



⁴ Other functions within DESPP include: Human Resources, Fiscal Services, Equal Employment Compliance, Legal/Government Affairs, STOPS, and Professional Standards Compliance.

The changes to the former Department of Public Safety were primarily administrative consolidations. For example, preceding the merger, both POST and the Department of Emergency Management and Homeland Security were free standing entities until they were made a council and Division respectively, under DESPP.

Mission of DESPP. The mission of the Department of Emergency Services and Public Protection is to protect and improve the quality of life for all by providing enforcement, regulatory, and scientific services through prevention, education, and innovative use of technology.⁵ Furthermore, this mission is achieved through the operations of the individual divisions depicted in Figure II-1. The majority of resources and personnel are within the Division of State Police, as discussed in more detail throughout this report.

Division of State Police

The Division of State Police is the largest division under DESPP. Through its core offices and units, it provides law enforcement protection and other services throughout the state.

Mission and goals. In addition to the department's mission, the state police has its own three-fold mission: 1) delivery of full service policing coverage to 81 of the state's 169 towns without their own police departments; 2) statewide delivery of specialized investigative resources utilized by local police agencies, federal law enforcement, and state police troops; and 3) traditional statewide highway patrol services.

As part of the State Police 2012-2015 Multiyear Plan, the department has developed specific goals, in four main categories, intended to assist managers in understanding the overall objectives of the department. This plan of both short-and long-term goals was created as part of the requirements for achieving accreditation through the law enforcement accrediting body CALEA.⁶ The four categories where the department has identified goals are: traffic and public safety; service; efficiency; and leadership.

Several of the specific goals within each category can change year to year and, as a result, are likely to always be goals the agency pursues. An example of this is the goal to *improve highway safety by reducing accidents and fatal motor crashes through education, visibility, enforcement and data driven evaluations*. While the division could have an increased presence on the road, issue more citations, and ultimately reduce accidents and fatalities in one year, this does not ensure the same results will be achieved in subsequent years, or that efforts in this area should be increased or decreased. Hence, the objective of improving highway safety will always be a goal of the state police regardless of the specific initiatives to achieve the goal which may change in any given year. On the other hand, some of the goals outlined in the plan have already been achieved or are in progress, such as commencing a trooper trainee class by June 2012,

⁵ A&O Manual 3.1.1(b)

⁶ The Commission on Accreditation for Law Enforcement or CALEA is a tiered law enforcement accreditation program. The program provides a process by which agencies can conduct an internal review and assessment of their policies and procedures and ultimately make necessary changes to meet the standards set by CALEA.

merging Troops H and W, and initiating the process of consolidating the dispatch function across the three districts.

Administration and Operations Manual. In addition to establishing goals and meeting standards set by CALEA, the Connecticut State Police (CSP) has an Administration and Operations Manual (A&O Manual). The manual, effective December 1987, was established by the Commissioner of Public Safety, now DESPP, pursuant to state statute.⁷ The manual is intended to provide all department employees and personnel who are either employed with the department, or who are working under department supervision, with written policy and procedures that are consistent with the goals of the agency's mission statement. Additionally, the manual offers definitions, descriptions, and other relevant information as to the structure and functions of the units throughout the department.

Roles and responsibilities. As part of this study, the program review committee was tasked with describing the roles and responsibilities of the Connecticut State Police. To determine the primary duties of CSP, relevant statutes and division mission and goals were reviewed to provide a baseline of CSP's primary function in the state.

Over time, both the legislature and the department have created initiatives expanding the CSP's responsibilities beyond its original duties. C.G.S. Sec 29-7 sets out the primary powers and duties of the state police:

- The Division of State Police within the Department of Emergency Services and Public Protection, upon its initiative, or when requested by any person, shall, whenever practical, assist in or assume the investigation, detection and prosecution of any criminal matter or alleged violation of law.
- All state policemen shall have, in any part of the state, the same powers with respect to criminal matters and the enforcement of the law relating thereto as policemen or constables have in their respective jurisdictions.
- Said commissioner shall devise and make effective a system of police patrols throughout the state, exclusive of cities or boroughs, for the purpose of preventing or detecting any violation of the criminal law or any law relating to motor vehicles and shall establish and maintain such barracks or substations as may prove necessary to accomplish such purpose.

These and other statutory requirements specifying state police activities form the authority for the state police function in Connecticut. Additionally, the Resident State Trooper program, established in statute⁸ and discussed in more detail later, serves as a vital component to the patrol function.

In addition to patrolling the state's highways, the primary functions of the state police include providing law enforcement and criminal investigation services for towns that do not have police departments, and participating in several specialized units and task forces at the local,

⁷C.G.S. Sec. 4-8 and Sec. 29-2

⁸ C.G.S. Sec. 29-5

state, and federal levels. Over time, the CSP has had to adapt to ever-increasing responsibilities and, especially in more recent years, has had to balance its increased responsibilities with decreasing staff resources.

Examples of the department's changing roles are reflected in societal changes in the state as a whole. Specifically, with the construction of highway systems throughout the state, more officers have been needed to fulfill increased traffic services functions. Moreover, as the nature, occurrence, and frequency of crime changed, the division and the legislature have created task forces and special units dedicated to preventing and investigating crimes, particularly related to narcotics, organized crime, and firearms trafficking. These specialized units have separate duties and responsibilities from the officers in the patrol function and require additional training, as discussed more fully later.

Individual state troopers can provide many services through a variety of roles. This includes:

- patrol officer;
- manager;
- detective;
- resident state trooper;
- officer within a specialized unit;
- trainer at the state police training academy; or
- support for other local, state, and federal law enforcement officers.

While the critical CSP responsibilities are discussed below, it is difficult to fully capture and exhaust all the functions CSP performs on a daily basis.

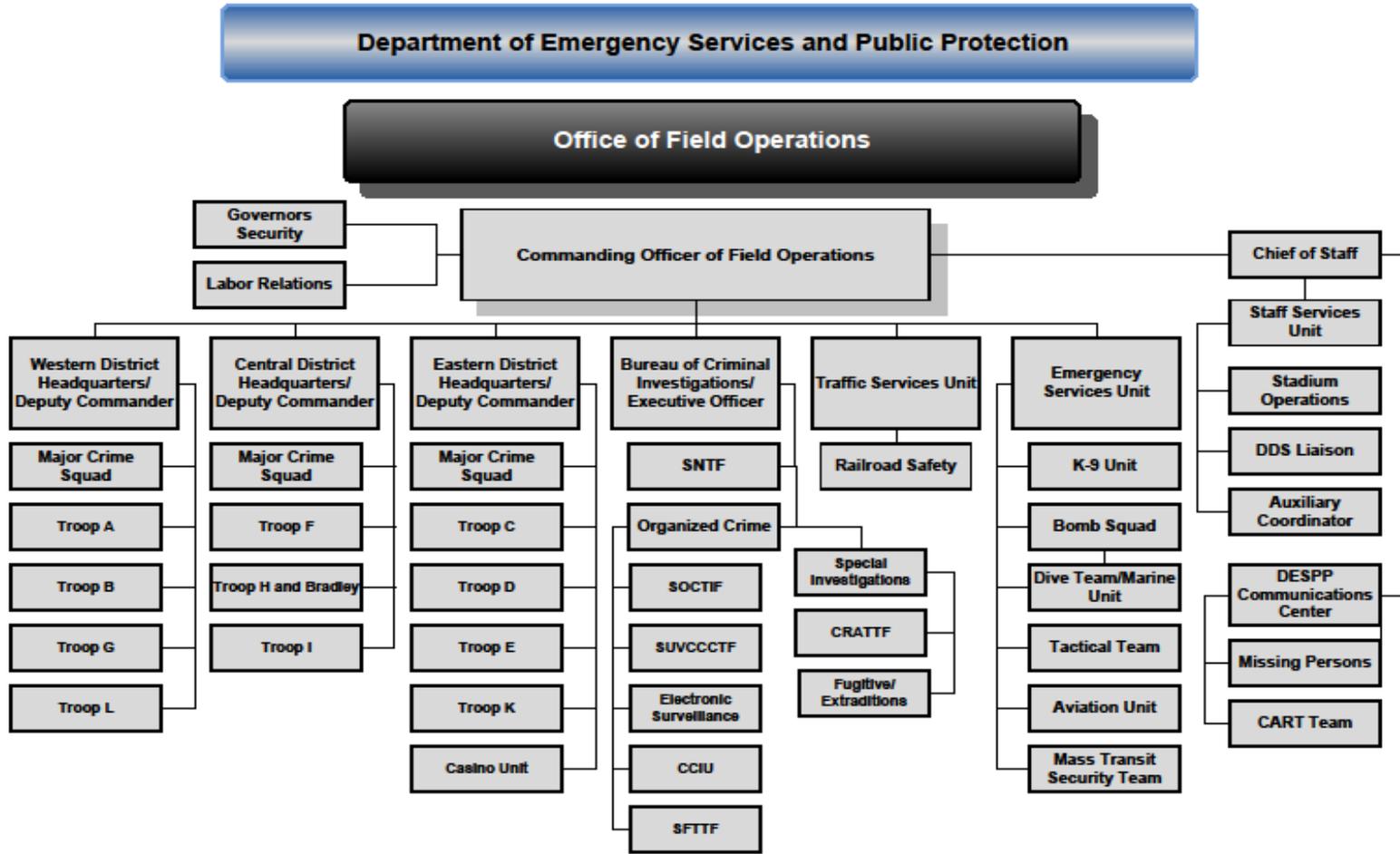
Organization of the Division of State Police

The organization of the Division of State Police can be broken down into three key areas: Office of Field Operations (OFO); Office of Administrative Services (OAS); and Bureau of Professional Standards. These three areas of the division employ the sworn and civilian personnel required for providing police and support services to in the state. An overview of the Division of State Police, and detail on each of its main functional areas, is provided below.

I. Office of Field Operations

The Office of Field Operations (OFO) is responsible for providing the direct law enforcement services to the state's citizens through its 11 troops within three geographical districts statewide. A majority of OFO's sworn personnel work within the troops and districts. Figure II-2., shows the organization of OFO and, as shown in the chart, the office has several components: troops, specialized units, and several other non-specialized units that report directly to OFO.

Figure II-2. Organizational Chart: Office of Field Operations



Tables of Organization
Office of Field Operations
Rev. 10-19-12

District structure. Connecticut is divided into three geographic districts for state police field operations: Western, Central, and Eastern. Each district is overseen by a commanding and executive officer with the ranks of Major and Captain, respectively. The district commander report directly to the OFO commander, but also assists in devising and implementing operational policies and procedures to govern their assigned personnel at the troop level.⁹ Each of the three districts is comprised of troops, which provide the patrol and local law enforcement functions within their boundaries. Table II-1. lists the troops that make up each district

Table II-1. District Composition		
<i>Western District</i>	<i>Central District</i>	<i>Eastern District</i>
Troop A	Troop F	Troop C
Troop B	Troop H/Bradley International Airport	Troop D
Troop G	Troop I	Troop E
Troop L		Troop K

Major Crimes. Each district operates a Major Crimes Squad (MCS), with a Major Crimes Criminal Investigations Unit (CIU) located at each of the district’s troops. CIUs are staffed with one Sergeant and a number of detectives. Major Crime personnel at the district and troop levels are the primary investigators for complex cases occurring within the geographical areas over which the district has primary law enforcement jurisdiction. The CIUs will also investigate crimes committed within the towns patrolled by local police as requested by the local police administration or the local State’s Attorney’s Office. In addition to detectives, each district has a major crimes van located at the district headquarters that functions as a mobile reconstruction lab for processing crime scenes. The MCS Commander ensures that the major crimes van and squad are prepared to respond at any time.

MCS investigators process major crimes scenes and assume primary responsibility for investigating the cases where state police have primary jurisdiction. The types of cases are:

- homicide;
- assaults which may result in death;
- bank robbery;
- kidnapping (first degree)
- arson and suspicious explosion;
- suspicious death; and
- any other case assigned by district commander.

Based on the types of crimes investigated by MCS, the amount of time necessary for case investigations varies.

⁹ A & O Manual 2.2.3(4)(c)

Troop structure. Similar to the district command structure, troops have a commanding and executive officers with the ranks of Lieutenant and Master Sergeant respectively.¹⁰ The troop commander is appointed by the commissioner and is responsible for the geographic area that comprises his or her troop, while the executive officer serves as the second-in-command. In addition to sworn personnel, each troop has a number of civilian employees who carry out the dispatch function and other clerical duties. Figure II-3., below shows the district-and troop level rank structure.

Figure II-3. District and Troop Rank Structure

District Level
District Commander (Major)
Executive Officer (Captain)
Troop Level
Commanding Officer (Lieutenant)
Executive Officer (Master Sergeant or Sergeant)
Patrol Manager (Sergeant)
Patrol (Trooper)

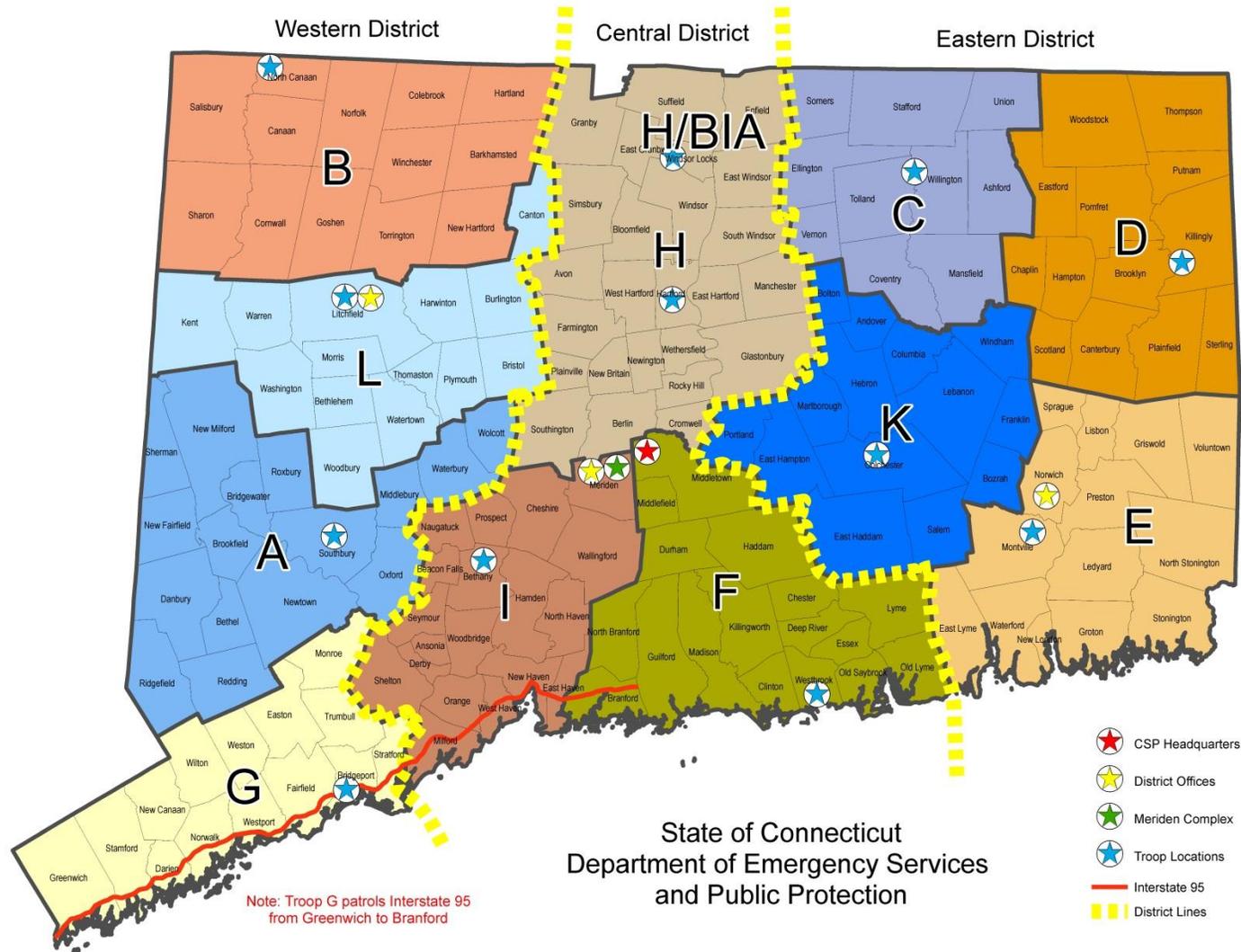
Each troop has a physical location known as a barracks where all police operations, such as dispatch and administrative operations, derive. These barracks serve as the central locations where patrol officers report and receive their daily patrols, work on reports, and complete other administrative tasks. Additionally, each barracks is equipped to hold evidence and prisoners as needed. Currently, CSP has primary jurisdiction over 81 towns across the state, and the state's other 88 towns are covered by a local police department. The map on page 15 shows the district and troop boundaries across the state.¹¹

¹⁰ Per the A&O Manual the Troop Executive Officer can hold the rank of Master Sergeant or senior Sergeant.

¹¹ Troops W was merged into Troop H in March of 2012.

Connecticut State Police Facilities

16



State of Connecticut
Department of Emergency Services
and Public Protection

Patrol function. As mentioned earlier, one of the responsibilities of the state police is to patrol the state's highways and secondary roads, and towns that do not have their own local force. This responsibility encompasses over 600 miles of limited access highways¹² and 7,000 miles of state and local roads.¹³ As part of their individual staffing analyses, the Troops submitted the number of limited access highway mile that the troop covers, which are presented in Table II-2 below.¹⁴

Table II-2. Limited Access Highway and Secondary Roadway Mileage Reported by Troop (mi.)			
Troop	LAH*	Secondary roadway	Notes
A	161.9	-	none provided
B	298.51	664.5	none provided
C	52	800	
D	40	1,000	
E	52	826	
F	76.5	256	
G	236	-	There are no towns under CSP jurisdiction- Hwy patrol only
H	290	-	Jurisdiction of East Granby only through RST program
I	169.6	15.7	Only reported major secondary roadways mileage
K	98	700	
L	15.8	1,273.4	
Total	1,490.31	5,535.6	
Source: Connecticut State Police Staffing Analyses			

The patrol function is completed through the deployment of officers from each of the eleven barracks. This job function is described in the department's A&O Manual as being the backbone of the department and is the operational component of the state police requiring the largest allocation of trooper resources.

The patrol function encompasses all police responsibilities. The patrol trooper, as part of the basic patrol objective, creates the public impression of police omnipresence. This is accomplished by using unpredictable patrol patterns, unmarked cruisers, or by special-purpose

¹² C.G.S. Sec. 13a-1 defines a limited access highway (LAH) as "any state highway so designated under the provision of 13b-27. Sec 13a-4 defines "state highway" as a highway, bridge or appurtenance to a highway or bridge designated as part of the state highway system within the provisions of chapter 237, or a highway, bridge or appurtenance to a highway or bridge specifically included in the state highway system by general statute. Additionally, "Highway" includes any state or other public highway, road, street, avenue, alley, driveway, parkway or place, under the control of the state or any political subdivision thereof, dedicated, appropriated or opened to public travel or other use. (C.G.S. Sec. 14-1(40)).

¹³ Department of Emergency Services and Public Protection, Program Description, 2013 State Budget.

¹⁴ This does not exhaust the total highway or secondary roadways that the Troop might cover in the towns CSP has jurisdiction over.

troopers and equipment.¹⁵ The primary duties of the patrol function, as outlined in the A&O Manual, include:

- suppress law violations, including motor vehicle laws;
- suppress civil disturbances;
- arrest law violators; and
- provide aid, relief and information to citizens.

Planning and management of the patrol function. Each troop provides twentyfour-hour patrol coverage, seven days a week. Troopers are scheduled on a “5-3 workweek” whereby each officer works five days and then has 3 days off on a rotating schedule. Officers can utilize their three days off to work overtime assignments, however, an officer cannot work more than 18 hours in a 24-hour period and cannot fill more than two of their three days off with overtime assignments, as discussed later in the report.

At each troop the day is broken down into three shifts. The start times of these shifts may vary troop to troop but shifts are divided into *days, evenings, and midnights*. Each shift requires a minimum number of officers to cover the patrol function based on the number of patrols established by the troop. All of the troops have a minimum of four patrols for each shift, however, the number of patrols within each troop has, in most cases, not been revised in the last 30-40 years.¹⁶ It is important to note that several of the troops have reconfigured their existing patrols or added an officer to meet certain needs, even though the actual number of patrols has not increased over time. These adjustments result, for example, from the need to account for changes in crime, population density, and other factors.

A regular shift for a trooper at a barracks is either 9 or 9.25 hours, depending on where the officer is in their 56-day work cycle. The 56 day work cycle consists of the following:

- 20 days at 9.25 hours;
- 15 days at 9 hours; and
- 21 days off.¹⁷

Before and after an officer’s shift, he or she will conduct what is called General Patrol (GP). GP is the 30 minutes before and the 30 minutes after a shift that an officer commutes to and from his or her home to the barracks. During this time the officer is able to take calls for service, assist with calls, and serve as a presence on the road during the trooper’s commute.¹⁸

Officers with the rank of Major and above work a “5-2, eight-hour” shift. Unlike the ranks of Captain and below, the commute time to and from work is not compensable. During the

¹⁵State Police A & O Manual: 15.3.

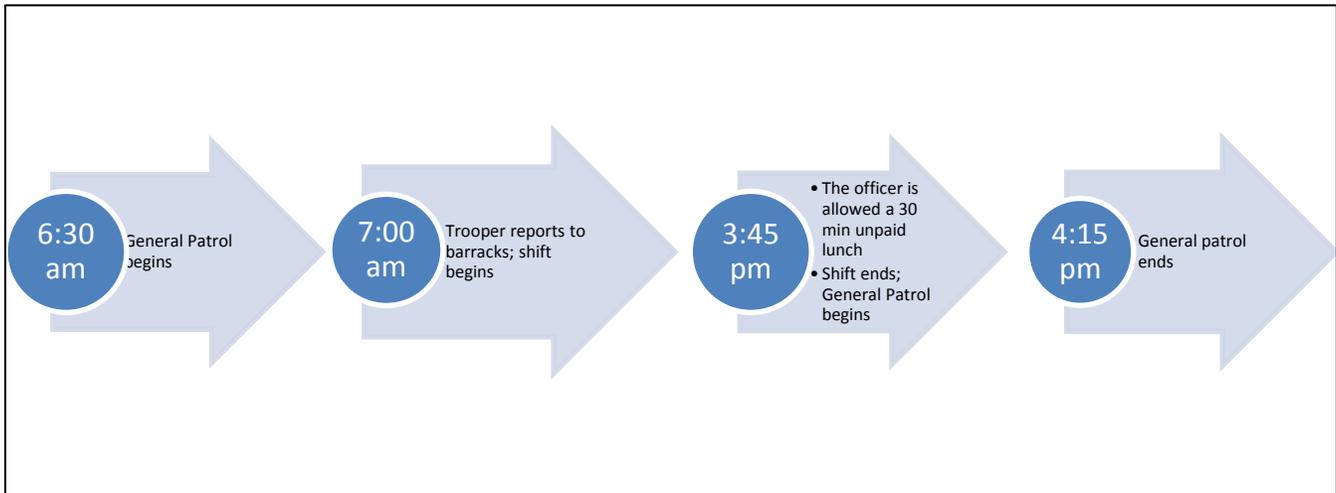
¹⁶ Troop H was able to increase its number of patrols by 1 in 2006-2007. Additionally, Troop E had a loop patrol on weekends that covered the casinos located in the troop boundaries; the patrol no longer exists.

¹⁷ The configuration described averages to a 40-hour workweek.

¹⁸ The general patrol is 30 minutes. It does not take every officer that amount of time to commute from their homes to the barracks. This is a paid function of the state police per the NP-1 collective bargaining contract.

shift, officers have an unpaid thirty minute lunch, but may be called upon to answer calls for service. Figure II-4 breaks down one shift, for a patrol trooper, given a 9.25 hour day.

Figure II-4. Shift Schedule for a Patrol Trooper based on 9.25 hour workday



Additional patrol efforts. While the patrol structure has not changed in the last several decades for most troops, additional measures have been taken to increase safety on the state’s roadways during peak commuting hours. Specifically, the federally funded Highway Incident Management System (HIMS) program engages both CSP and DOT personnel in order to reduce incidents and delays along I-95. Based on identified “hot spots,” three troopers and a Sergeant from Troop G are assigned to these designated areas. The program allows the day shift at the troop to be held over for a total of 4 additional hours to assist with traffic control.

Dispatch consolidation. In addition to the civilianization efforts within specific units under the Division of State Police, as discussed later in the report, the division consolidated the dispatch functions in one of its three command districts. A few of the initial goals the department identified as part of this initiative were to allow the reassignment of sworn troopers back to patrol duties, improve the department's ability to respond to incoming calls for service during both planned events and unplanned large scale emergencies, and achieve operational efficiencies and cost savings.¹⁹

Dispatch consolidation was first implemented in Western District Troops A, B and L beginning in May 2012. The consolidated dispatch center is located at Troop L in Litchfield. Prior to May 2012, each troop had its own dispatch center, staffed with civilian dispatchers and one desk trooper to take calls each shift continuously. Before consolidation, a desk trooper at each troop barracks remained at the desk, answered calls, and performed other administrative tasks, such as assisting walk-ins.

¹⁹ Connecticut State Police, *State Police Dispatch Consolidation of Troops A, B, & L, 2012*.

Post-consolidation, a state police Sergeant is still present to aid civilian staff in the deployment of troopers, make decisions about the troops, and ultimately oversee the now consolidated dispatch center during each shift. Part of this recent effort was to reassign the former desk troopers back to patrol duties. To date, a new patrol has not been formally added to the current levels at any of the Western District troops, however, personnel who previously served as desk troopers at Troops A and B are permitted to leave the troops to address calls for service or assist other troopers when necessary. Alarm systems at Troop A and B have been installed permitting the previous “desk officer” to leave the building as necessary. Each troop reports regularly as to that portion of time when the desk officer is deployed to outside calls for service. The alarm installations were necessary due to the storage of evidence and other confidential material at the barracks.

No analysis has been completed by the department at this time to determine the efficiency of the recently-consolidated dispatch function. The department should continue to evaluate this effort and obtain feedback from the troops, including rank and file troopers, to ensure the original goals continue to be met.

The Eastern District dispatch function will be consolidated next, with operations to be located in Troop C in Tolland. This consolidation will include troops C, D, E, and K. The Central District will be consolidated once the Eastern District dispatch is fully operational.

Diversity among troops. PRI staff interviewed command personnel and patrol troopers at each of the troops in order to learn about the daily operations and unique characteristics of the troops. It became evident that no troop deals with the same incident characteristics. Some of the differences among troops are highlighted below, several of which are covered in detail throughout the report and staffing analysis:

- geographical makeup;
- roadways (whether highway or local);
- population;
- call for service volume; and
- types of calls for service that occur within troop boundaries.

Table II-3, shows the total land area by troop and by CSP and non-CSP jurisdiction. The state police jurisdiction²⁰ is larger in seven out of eleven troops than the land area within troops where a local police department is established. A full description of CSP and non-CSP jurisdiction towns is provided in Chapter III.

²⁰ CSP has primary jurisdiction and /or a resident state trooper town

Table II-3. Total Land Area by Troop			
Troop	Total Land Area 2010 (sq. mi)	CSP Jurisdiction Land Area (sq. mi)	Non-CSP Jurisdiction Land Area (sq. mi)
A	505.43	156.76	330.5
B	528.94	441.3	72.26
C	366.85	305.55	55.27
D	454.07	404.81	42.36
E	500.19	302.45	136.14
F	442.82	226.18	202.13
G*	580.21	-	349.69
H	648.24	17.56	592.79
I	259.26	45.03	321.83
K	433.95	364.19	59.00
L	400.56	302.69	113.87
Total	5120.52	2566.52	2275.84

*Troop G has no towns under CSP jurisdiction
Source PRI Staff Analysis

Another difference between troops is the populations they serve. Table I-4. highlights some of the differences among troop populations.

Table II-4. Population by Troop						
Troop	Total Population 2000	Total Population 2010	% Change Population	2010 Population Density (sq. mi)	2010 Non-CSP Jurisdiction Population as % of Total Population	2010 CSP Jurisdiction Population as % of Total Population
A	371,709	394,086	6.02%	809	84%	16%
B	76,098	79,170	4.04%	154		
C	118,828	133,554	12.39%	370		
D	82,136	88,843	8.17%	199		
E	220,158	231,970	5.37%	529		
F	203,050	213,164	4.98%	498		
G	661,163	682,523	3.23%	1,952		
H	785,241	819,431	4.35%	1,343		
I	622,939	651,751	4.63%	1,777		
K	110,125	118,795	7.87%	281		
L	154,118	160,810	4.34%	386		
Total	3,405,565	3,574,097	4.95%	-		

Source: PRI staff analysis

Table II-5 shows the population change by troop for the municipalities under CSP jurisdiction. Overall, the populations within CSP jurisdiction increased in from 2000 to 2010. The largest percentage increase of 16 percent is seen in Troop C. One reason for this increase could be due to the University of Connecticut main campus residing in the Troop boundaries.

Table II-5. Population change in CSP Jurisdictions by Troop			
Troop	2000 CSP Jurisdiction Population	2010 CSP Jurisdiction Population	% Change
A	50,128	54,038	7.8%
B	30,232	31,545	4.3%
C	79,261	91,940	16.0%
D	67,517	73,438	8.8%
E	81,405	85,680	5.3%
F	54,577	58,937	8.0%
G	-	-	-
H	4,745	5,148	8.5%
I	18,993	21,017	10.7%
K	88,041	96,328	9.4%
L	44,418	47,397	6.7%
Total	519,317	565,468	8.9%
Sources: PRI Staff Analysis; 2000 & 2010 Census Data.			

Similar to the CSP jurisdiction, the non-CSP jurisdiction areas within the troops also experienced an increase in population from 2000 to 2010.

Table II-6. Population change in Non-CSP Jurisdictions by Troop			
Troop	2000 Non-CSP Jurisdiction Population	2010 Non-CSP Jurisdiction Population	% Change
A	321,581	340,048	5.7%
B	45,866	47,625	3.8%
C	39,567	41,614	5.2%
D	14,619	15,405	5.4%
E	138,753	146,290	5.4%
F	148,473	154,227	3.9%
G	661,163	682,523	3.2%
H	780,496	814,283	4.3%
I	603,946	630,734	4.4%
K	22,084	22,467	1.7%
L	109,700	113,413	3.4%
Total	2,886,248	3,008,629	4.2%
Sources: PRI Staff Analysis; 2000& 2010 Census Data			

In addition to geographical and population differences, each troop is responsible for responding to varying types of calls for service and patrolling at all state buildings (e.g. courts, correctional facilities), rest areas, state parks, weigh stations, casinos and state schools within their troop boundaries. This list is not exhaustive but provides an idea of instances when a trooper may be handling calls that are within another town's jurisdiction, or off the highway, and which may consume the officer's time.

Specialized Units within OFO

In addition to the police services provided at the district and troop levels, there are several specialized units within the Office of Field Operations staffed with sworn personnel. These units have been created both by legislation and the state police, as responsibilities have expanded over time. A specialized assignment is a non-patrol placement of an officer for more than 90 days where a Trooper, Trooper First Class or Sergeant can apply to transfer to a specialized unit.²¹

Troopers selected to work in these units conduct complex and in-depth investigations, and on many occasions collaborate with other law enforcement officials at the local, state, and federal levels in their specialized field. These units are considered “specialized” because the positions, filled by sworn officers, require specific skills, knowledge and abilities in addition to the law enforcement expertise possessed by the officer.

The process to apply for a specialized unit is outlined in the A&O Manual. Once an opening in a specialized unit becomes available, a department-wide announcement of the vacancy is made. This announcement includes a list of the minimum qualifications and/or special skills required to successfully complete the duties of the position. The criteria for a position in a specialized assignment vary by the unit for which the candidate is applying.

Important to the specialized units is most of the job functions performed are not visible outside the department. These units provide a range of services that cannot be performed at the troop level because of the additional training and skill necessary to complete the types of investigations performed by the units.

Committee staff has been told these units on the whole, similar to other functions of the division, have become reactionary in nature due to funding and staffing shortages. The division, over time, in order to staff the patrol function out of the troops, has transferred officers out of the specialized units and placed them back on the road.²² In several cases, vacancies due to reassignment to the patrol function, retirement, transfers, or promotion have not been backfilled. This has left several units only able to maintain daily operations and limited the ability to conduct investigations, decrease backlog, and be proactive.

Bureau of Criminal Investigation. The Bureau of Criminal Investigation (BCI) performs specialized department criminal investigations and is comprised of seven task forces and units implemented by statute or contract. The units conduct long-term and multifaceted investigations. Based on the current staffing levels in some of the units, as discussed in greater detail later in the report, the units are filing the necessary reports, however, there are not enough personnel to conduct investigations. In some cases, it would be considered unsafe for the officers remaining in the units to conduct certain functions because of the possible risk involved in the type of investigations conducted.

²¹ Connecticut State Police A & O Manual 4.5.3 Specialized Assignments, CALEA 16.2.1b.

²² Some of the units did have the officers pulled for patrol brought back into their original assignments after a period of time.

One unique aspect of BCI is many of the units were established to integrate local officers who are granted special state police authority while assigned to the bureau. Although this function has historically provided the opportunity to increase investigative resources and enhance communications between CSP and local authorities over the last several years, this integration has diminished. Many factors have been cited by the bureau as contributing to this decrease, such as budget, staffing shortfalls, and limitations with the local officer incentive funding. The seven units that operate within the Bureau are shown in Figure II-5 and described more fully in Appendix A.

Figure II-5. Bureau of Criminal Investigations Specialized Units



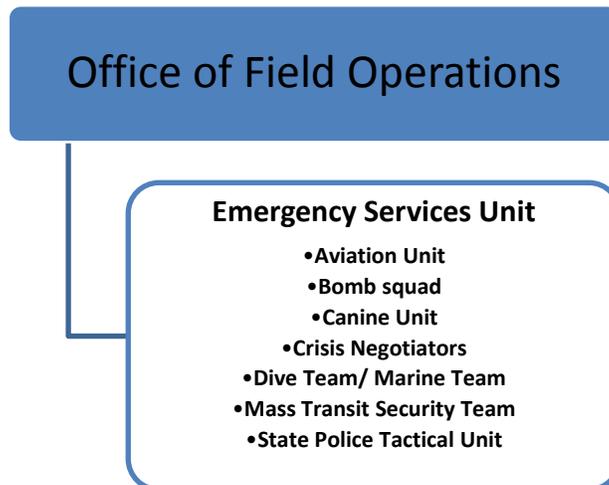
Emergency Services Unit (ESU): Another group of specialized units in OFO are within the Emergency Services Unit (ESU). ESU provides specialized emergency services independently, in support of department tactical commands, or at the request from local police departments.²³ ESU is comprised of nine units and is centrally headquartered at the Fleet Administration building in Colchester. The unit provides specialized assistance to all State Police Troops/Units, as well as local, federal, or other state agencies as necessary.

What is unique and important about ESU is many of the Troopers and Sergeants within the units are trained and capable of fulfilling multiple roles across the nine units. ESU has full-time staff who are responsible for day-to-day operations, administrative functions, equipment maintenance, scheduling of specialization training, applying for grant funding and other responsibilities. Additionally, there are a number of part-time officers, performing varying functions in other units across the agency (e.g., HQ, Troops), who respond to calls the units receive at a moment's notice.

²³ A&O Manual 2.2.3(b)(3)

Like the Bureau of Criminal Investigation, Emergency Services has experienced times when officers have been reassigned, for a period of time, to patrol functions within troops. The units within ESU are shown in Figure II-6 and described in Appendix A.

Figure II-6. Specialized Units within Emergency Services Unit



Traffic Services Unit. The Traffic Services Unit is responsible for the delivery of specialized traffic enforcement service statewide. In addition, the unit is responsible for a variety of non-enforcement functions, including collision reconstruction, facilitating traffic escorts for dignitaries, high profile prisoner transports and providing specialized training to state police personnel and municipal police agencies. The Commanding Officer of the unit serves as the State Traffic Coordinator and, as part of this function, is responsible for administering all agency highway safety programs and coordinating accident prevention efforts statewide. There are several enforcement and safety education programs maintained by the unit, some examples include: DUI Detection, Breath Alcohol Testing Mobile (BAT), Seatbelt Enforcement, Highway Work Zone Safety, Comprehensive Speed/Safety projects and traffic safety education initiatives.

The unit has three principle enforcement components: Commercial Vehicle Enforcement Teams, Aggressive Driving Enforcement Teams, and Collision Analysis and Reconstruction Unit (C.A.R.S.). These components are described in Appendix A.

Direct reports to OFO. In addition to the troops and specialized units within the Office of Field Operations, there are sworn personnel dedicated to several other functions that require a direct report to OFO command staff. Services provided by some of these units are required by statute or formal agreement (i.e., under a Memorandum of Understanding). These direct reports include:

- Department of Developmental Services (MOU);
- Governor’s Security Unit (C.G.S. Sec. 29-5f);

- Missing Persons Team; and
- Stadium Operations/Renstschler Field.

Descriptions of these units are provided in Appendix A..

II. Office of Administrative Services

Figure II-7. shows the functions of the Office of Administrative Services (OAS). The office is responsible for division training, planning, and support duties. In addition to providing logistical support to the division, OAS maintains several registries and licensing bureaus. The office is divided into the following four bureaus:

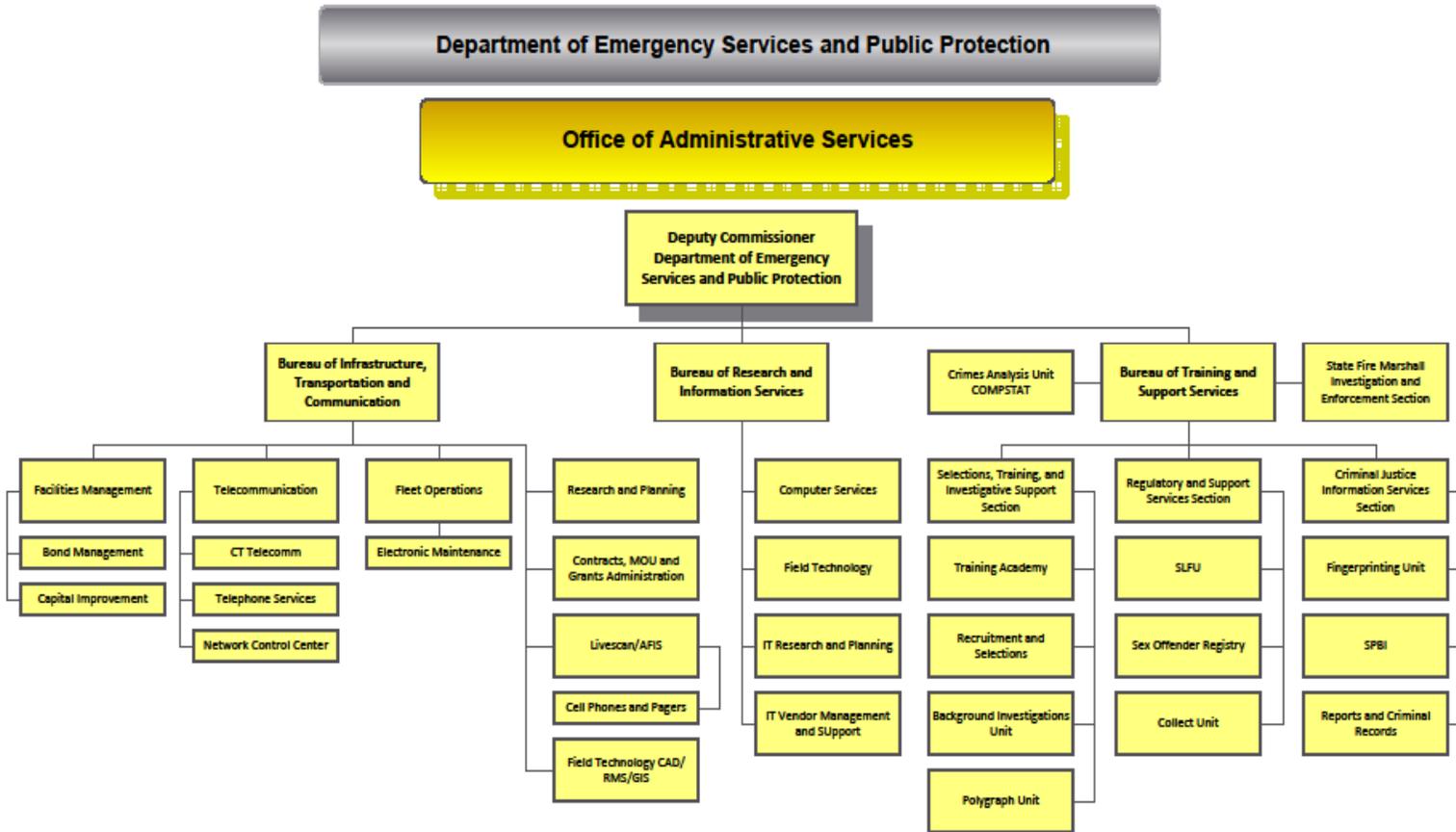
- Infrastructure, Transportation and Communication;
- Research and Information Services;
- Training and Support Services; and
- Professional Standards and Compliance.

Each bureau has several subunits which include, in some cases, both sworn and civilian personnel who carry out specific tasks in support of the division. The A&O Manual provides descriptions of each unit under OAS.

Specialized Units within OAS

The Office of Administrative Services, like OFO, has specialized units, which include the Polygraph Unit and the Fire and Explosion Investigative Unit. These units are considered specialized assignments per the A&O manual and have application and selection processes similar to specialized units under OFO. A description of these two units is provided in Appendix B.

Figure II-7. Organizational Chart: Office of Administrative Services



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III. Professional Standards and Compliance

The Bureau of Professional Standards and Compliance receives and investigates all complaints against personnel and any allegations of employee misconduct.²⁴ The bureau is also responsible for maintaining accreditation standards set by CALEA and POST, and performs evaluations of the department units and functions to ensure compliance with agency policies and procedures. These functions are carried out through four subcomponents of the Bureau: Internal Affairs, Inspections Unit, Risk Management Unit, and Accreditation Unit. Figure II-8 depicts the organization of the bureau.

Figure II-8. Professional Standards and Compliance Bureau



Tables of Organization
Professional Standards
Rev. 10-16-12

Other Areas with Sworn Personnel

While the primary provision of police services and support functions fall under the Division of State Police, there are sworn personnel in other divisions of the Department of Emergency Services and Public Protection. These offices, and sworn officers, provide investigative and other specialized services to the division and state through a number of units. Several of these units are listed in Table II-7 below and full descriptions of these areas are provided in Appendix C.

²⁴ A&O manual 2.2.3d

Table II-7. Other units within DESPP with Sworn Officers		
<i>Division/Bureau</i>	<i>Unit</i>	<i>Sub units</i>
Division of Scientific Services	Computer Crimes	N/A
Division of Emergency Management and Homeland Security (DEMHS)	Office of Counter Terrorism	Critical Infrastructure Unit (CIU) Joint Terrorism Task Force (JTTF) Connecticut Intelligence Center (CTIC)
*Light Duty Officer Source: State Police Staffing Analyses.		

Staffing

The Connecticut State Police Department was established in 1903 under a board of commissioners, which was required to appoint five state police officers and an additional five officers as the board saw fit. Since then, the staffing levels have been amended twenty-one times, of which the most recent change eliminated the minimum staffing level of 1,248 sworn officers in 2012.

Table II-8. shows the legislative changes to the number of sworn state police over time. From 1903 until 1972, the number of sworn personnel was specified in statute. In 1973, statute authorized the appointment of an “adequate number to efficiently operate the division within budgetary constraints.”²⁵

Statutory staffing requirements were not changed again until 1998, when legislation required the commissioner to appoint and maintain 1,248 sworn officers by July 1, 2001, and eliminated the requirement of appointments needing to be made within budgetary allowances.²⁶ In June 2012, the minimum staffing level of 1,248, a number that was only met on occasion, was removed from statute.

²⁵ PA 73-734

²⁶ PA 03-6 replaced “By July 1, 2012” with “On and after January 1, 2006” regarding the minimum number of sworn personnel.

Table II-8. Legislative Changes to Staffing Levels of CSP

Date	Legislation	Total No. of officers	Resident State Troopers	Notes
1903	1903 Ch. 141	Shall appoint five and may appoint an additional five as "necessity may require"		
1913	1913 Ch. 121	Shall appoint five and may appoint an additional ten as "necessity may require"		
1921	1921 Ch. 273	Shall appoint up to 50		
1923	1923 Ch. 202	Shall appoint up to 80		
1927	1927 Ch.292	Shall appoint up to 100		
1929	1929 Ch 214	Shall appoint 125		
1935	1935 Ch. 298	Shall appoint 175		
1937	1937 Ch. 389	Shall appoint 200		
1937	1937 Ch. 453	Shall appoint 225		
1941	1941 Ch 74	Shall appoint 277		
1945	PA 154	Shall appoint 302		
1947	PA 67	Shall appoint 312		
1953	PA 427	May appoint 362		
1957	PA 431	May appoint 462		
1959	PA 361		No more than 30	
1961	PA 606		No more than 36	
1963	PA 633	May appoint 512	-	Act increased no. from 450 to 500
1965	PA 290	May appoint 602	No more than 46	Increased no. of policemen to 590
1967	PA 127; PA 544	May appoint 667	No more than 55	Increased no. of policemen to 665
1969	PA 587; PA 602	May appoint 777	No more than 60	Increased no. of policemen to be appointed to 765
1972	SA 53	May appoint 822	-	Increased no. of to 810
1973	PA 73-734; PA 73-416	-	No more than 68	Replaced specific number of appointees with requirement that an adequate number be appointed to efficiently maintain departments' operation...
1985	PA 85-202	-		Deleted the language limiting the maximum number of resident state troopers to 68 and provided that appointments be made within available appropriations
1998	PA 98-151	A minimum of 1,248		Required commissioner to appoint and maintain a minimum of 1,248 by July 1, 2001
2003	PA 03-6			Replace July 1, 2001, with "on and after January 1, 2006
2012	PA 12-1	Eliminates the 1,248 minimum		Requires the emergency services and public protection commissioner to appoint and maintain the number that he judges and determines "sufficient to efficiently maintain the division."

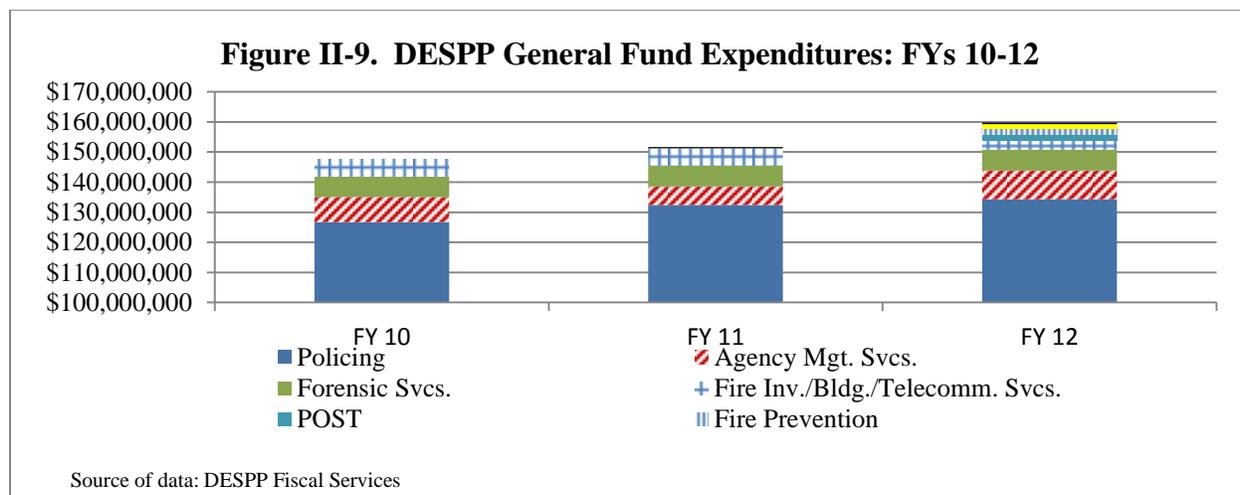
Sources: Legislative histories and OLR.

Current staffing methodology used by CSP. State police staffing has changed over time due to mission expansion and dynamic changes occurring across the state since CSP's inception. Today, CSP mainly relies on historical staffing levels for the patrol function at each of the barracks and many of the specialized units. The number of patrols nor the minimum number of troopers to staff the patrols in each troop, as discussed earlier, has not increased over the last 30-40 years, despite various increases in population, crime, traffic, and other attributing factors.

Command staff at the troops is aware of staffing issues related to their respective troops and when recently asked to prepare a staffing analysis by the department proposed varying thoughts and recommendations for achieving minimum and optimum staffing levels for the operations at their respective troops. Several methods were used by the command staff at each troop, including population and history.

General Fund Expenditures

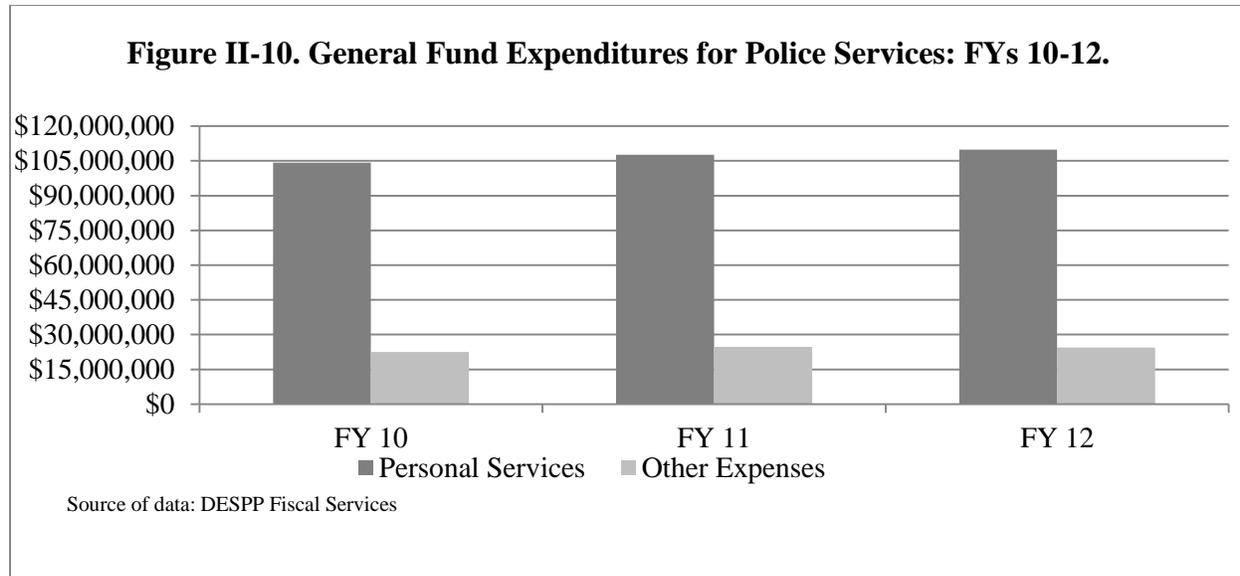
Figure II-9 shows the General Fund personal services and other expenditures for DESPP.²⁷ The program category Police Services accounts for the bulk of the expenditures and includes most of the department's core state police functions, such as field operations (i.e., troops) and the specialized units. As discussed earlier, changes resulting from P.A. 11-51 reorganized the former Department of Public Safety and placed several additional functions under the new Department of Emergency Services and Public Protection beginning in FY 12. In total, agency expenditures for personal services and other expenses increased just over eight percent for FYs 10-12, from \$147.7 million to \$159.7 million.



Police Services. Given the Police Services program category accounts for the vast majority of General Fund expenditures (and sworn personnel) within DESPP, and is the primary focus of this study, Figure II-10 provides a more detailed examination of this program. As the

²⁷ Examples of personal services expenses are full- and part-time salaries, overtime and longevity payments, federal insurance payments, shift differential payments, and meal allowances. Examples of other expenses are motor vehicle maintenance/repairs/rental/and fuel, laundry service, postage, fees, education/training, phone, and utilities.

figure shows, personal services expenditures increased 5.5 percent, from \$104.2 million in FY 10, to \$109.8 million in FY 12. Although other expenses increased over the three-year time frame, from \$22.5 million in FY 10 to \$24.4 million in FY 12 (8.3 percent), there was actually a decrease of roughly \$300,000 between FY 11 and FY 12.



Troop expenditures. The operational expenditures (personal services and other expenses) at the troop level were examined for FYs 10-12, as shown in Table II-9. Overall, troops averaged an 11.3 percent increase in operational costs for the three fiscal years, and all but two troops had overall cost increases. Troops H and A had the greatest percent increases, at 19.9 percent and 19.3 percent respectively. Troop H assumed Troop W in March 2012, which most likely accounts for the increase in operational costs that year. At the same time, excluding Troop W, Troop I was the only troop with an overall decrease in operational costs, at 1.4 percent. For FY 12, Troop G had the largest operations budget, \$9.9 million, while Troop B had the lowest at just over \$5 million.

Troop	FY 10	FY 11	FY 12	% Change
A	\$6,997,977	\$7,522,230	\$8,346,807	19.3%
B	\$4,731,153	\$4,822,301	\$5,046,068	6.7%
C	\$7,477,627	\$8,064,115	\$8,783,505	17.5%
D	\$6,268,443	\$6,765,612	\$7,031,570	12.2%
E	\$7,017,729	\$7,040,825	\$7,753,439	10.5%
F	\$6,844,313	\$7,125,939	\$7,667,239	12.0%
G	\$9,103,499	\$9,203,991	\$9,896,917	8.7%
H	\$7,148,362	\$7,210,974	\$8,571,199	19.9%
I	\$5,625,334	\$5,347,306	\$5,544,898	-1.4%
K	\$7,091,887	\$7,095,186	\$7,496,686	5.7%
L	\$5,948,144	\$6,349,694	\$7,056,480	18.6%
W	\$1,301,956	\$1,560,227	\$876,477*	-32.7%
	\$75,556,424	\$78,108,400	\$83,194,808	11.3%

*Troops W and H merged in March 2012.
Source of data: DESPP Fiscal Services

General trooper costs. In addition to the budget expenditures presented above, committee staff collected some general background information on Trooper start-up costs, recurring Trooper expenses, and overtime costs. Note that this information is not an exhaustive examination of such costs, but is provided solely for reference.

Based on the most recent Academy class, the Office of Fiscal Analysis (OFA), in conjunction with the Office of Policy and Management (OPM), calculated that the current start-up cost to recruit and train for hire one new trooper was \$57,500. In addition, the total annualized cost for a Trooper's first year of service, taking into account start-up costs, fringe benefit costs, and prorated annual costs, was calculated to be \$103,900. After a Trooper's first year of service, the annual recurring cost for the Trooper, including fringe benefits, was determined to be \$80,600.

Although a full analysis of whether it is more or less expensive to hire new Troopers or pay overtime costs to current Troopers was not completed as part of this study, information was provided by OFA analyzing such overtime cost savings. For example, as a way to determine the cost savings if one current Trooper did not work overtime for one year, the analysis first determined the Trooper overtime average per-hour rate for FY 12, which was \$54. This total takes into account the various overtime rates paid to all Troopers at different salary levels. Next, the savings in overtime for any given Trooper was calculated if overtime was completely eliminated for one year. This was done by taking the total number of regular work hours available for a Trooper to work in a year (2,060).

Given Troopers cannot work their full 2,060 hours as overtime because they need to fulfill their normal job duties, a factor of 60 percent was used as a base for the number of overtime hours that could be worked, which calculates to 1,230 hours. This number was then multiplied against the average \$54 per-hour overtime rate paid to Troopers. As a result, the total overtime cost defrayed for one Trooper, for one year, was determined to be \$66,800. Again, committee staff cautions that additional comparative analysis is warranted to fully examine any cost savings realized by eliminating/reducing overtime versus hiring new Troopers.

Grants. In addition to General Fund budget expenditures, information was received from DESPP for state and federal grants for the Division of State Police, as shown in Appendix F. For the last three years, the division received a total of \$25.3 million in grant funding.

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Changes in Municipal Police Policy and Staffing

As part of the program review committee's charge to develop recommended staffing standards, P.A. 12-1 requires the committee to consider "changes in municipal police policy and staffing." This consideration reflects the reality in Connecticut that the decision each of the state's 169 municipalities makes about the provision of police protection impacts State Police force staffing. With respect to this charge, PRI staff focused its analysis on:

- the various ways law enforcement services are provided at the municipal level, with particular attention on the Resident State Trooper program;
- what, if any, changes in municipal law enforcement service-structure have occurred in recent years; and
- regionalization efforts among municipalities for providing select police services.

In summary, although there has been very little change over the past decade in the types of law enforcement coverage within the state's municipalities, policy decisions made at the local level regarding the type of police coverage a municipality wants affects the overall staffing resources of the State Police. Moreover, CSP is contractually-bound with particular municipalities to provide troopers for law enforcement purposes, in return for those municipalities paying 70 percent of the trooper expenses - 110 resident troopers (roughly 20 percent of State Police patrol troopers) were assigned to 55 municipalities in FY 12. Another 26 towns were without any law enforcement structure and were patrolled by the State Police as part of troop patrol coverage. In total, CSP has primary law enforcement jurisdiction in towns with approximately 16 percent of the state's population and 52 percent of the state's total geographic area.

Municipal Authority

Among the many municipal powers granted by state law is to "provide for police protection and regulate and prescribe the duties of the persons providing police protection with respect to criminal matters within the limits of the municipality for the safekeeping of all persons arrested and awaiting trial and do all other things necessary or desirable for the policing of the municipality."²⁸ A municipality may provide police protection for its citizens in many ways, as discussed below, and is not limited to establishing an organized police department. However, while municipalities have the authority, they are not required to provide for these services, and statutorily do not have to take any action to develop a local structure to provide law enforcement services.

²⁸ C.G.S. Sec. 7-148(c)(4)

Municipal Policies for Providing Law Enforcement Services

There are different ways general police services are provided currently within municipalities in Connecticut based on the policy decisions made at the local level. Overall, municipal law enforcement policies can be grouped in four ways:

Policy 1: Local organized police department overseen by a police chief: **88 towns (52%)**.

Policy 2: Resident State Trooper contract, with “special constables” appointed by the town Chief Elected Officer and employed as local police officers certified by POST (full- or part-time): **34 towns (20%)**.

Policy 3: Resident State Trooper contract, no appointed “special constables.” **21 towns (12%)**.

Policy 4: Total reliance on the State Police troop that includes the municipality within its boundaries: **26 towns (15%)**

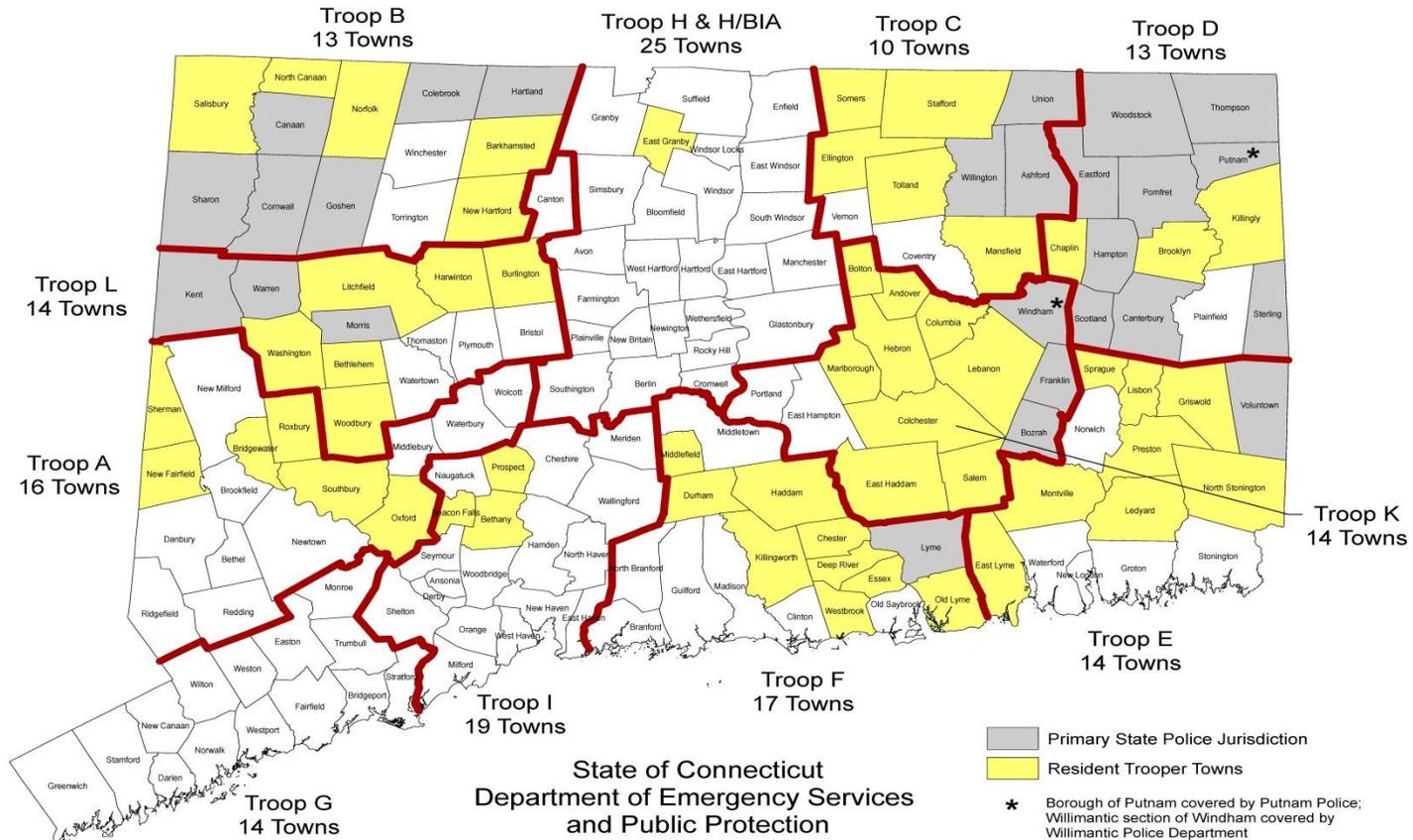
Generally, towns utilizing Policies 1 and 4 described above are at opposite ends of the state’s municipal police coverage continuum. For example, towns with their own local organized police departments (i.e., Policy 1) are covered 24 hours a day, year-round, whereas in other towns, law enforcement services rest solely with State Police troop where the municipality is located (i.e., Policy 4).

Towns using Policy 2 or Policy 3 above, present a more complicated situation in terms of their impact on State Police trooper staffing. Such towns – even though they have resident troopers and/or special constables – will, at certain times of day or week, rely on the State Police troops to provide primary police coverage, similar to those towns that continuously rely on the State Police for patrol coverage. Depending on the number of resident troopers a town contracts for and whether it uses special constables and how they are deployed by shift, there may be times when either no resident trooper or special constable is on duty. As such, CSP patrols provide coverage for those towns.

A map of the state showing the type of local law enforcement coverage by town is provided in Figure III-1 (towns with special constables are not specifically indicated, but are discussed later in this section). A description of the different policies municipalities use to provide law enforcement protection is provided below. A full accounting of the municipal law enforcement delivery policies by town, and the corresponding number of officers, is provided in Appendix D..

Figure III-1.

Connecticut State Police Town Coverage



Map Prepared by OSET GIS Division
15 August 2012

Policy 1 - Organized Local Police Departments

There are 88 municipalities in Connecticut with their own local police departments.²⁹ In addition, although not specifically designated as municipalities, the following entities within municipalities have police departments and officers: 1) a Special Services District within the Town of Putnam employs 15 officers, known as the Putnam Police Department; 2) the City of Willimantic within the Town of Windham has 43 officers; and 3) Groton City and Groton Long Point – both political subdivisions within the Town of Groton – have 31 and 10 officers respectively. The Towns of Putnam and Windham are otherwise patrolled by the State Police, and the Town of Groton has its own police force.

Table III-1 provides a list of the towns with municipal police departments and the number of POST-trained law enforcement officers for each town.

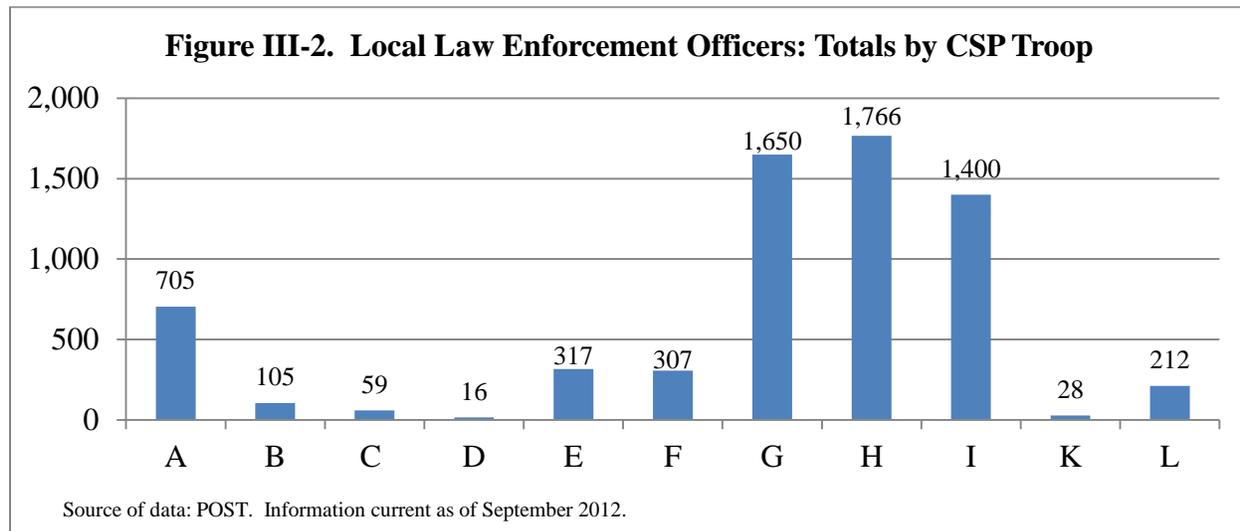
Table III-1. Law Enforcement Officers by Municipality: September 2012								
	Town	# Officers		Town	# Officers		Town	# Officers
1	Ansonia	46	31	Hamden	104	61	Seymour	42
2	Avon	36	32	Hartford	481	62	Shelton	54
3	Berlin	41	33	Madison	32	63	Simsbury	35
4	Bethel	39	34	Manchester	116	64	S. Windsor	40
5	Bloomfield	48	35	Meriden	123	65	Southington	73
6	Branford	59	36	Middlebury	15	66	Stamford	275
7	Bridgeport	442	37	Middletown	103	67	Stonington	38
8	Bristol	110	38	Milford	112	68	Stratford	115
9	Brookfield	34	39	Monroe	44	69	Suffield	22
10	Canton	15	40	Naugatuck	56	70	Thomaston	15
11	Cheshire	49	41	New Britain	131	71	Torrington	87
12	Clinton	27	42	New Canaan	43	72	Trumbull	74
13	Coventry	14	43	New Haven	418	73	Vernon	45
14	Cromwell	26	44	New London	81	74	Wallingford	67
15	Danbury	157	45	New Milford	49	75	Waterbury	282
16	Darien	55	46	Newington	51	76	Waterford	48
17	Derby	36	47	Newtown	46	77	Watertown	45
18	East Hampton	16	48	N. Branford	22	78	West Hartford	126
19	East Hartford	120	49	North Haven	49	79	West Haven	119
20	East Haven	56	50	Norwalk	173	80	Weston	15
21	East Windsor	20	51	Norwich	83	81	Westport	73
22	Easton	17	52	Old Saybrook	27	82	Wethersfield	48
23	Enfield	94	53	Orange	43	83	Wilton	43
24	Fairfield	107	54	Plainfield	16	84	Winchester	18
25	Farmington	49	55	Plainville	31	85	Windsor	49
26	Glastonbury	56	56	Plymouth	27	86	Windsor Locks	24
27	Granby	15	57	Portland	12	87	Wolcott	25
28	Greenwich	174	58	Redding	17	88	Woodbridge	26
29	Groton	67	59	Ridgefield	41			
30	Guilford	37	60	Rocky Hill	34			

Source of data: Police Officer Standards and Training Council.

²⁹ Law enforcement officers within municipal police departments receive their required training through the Police Officer Standards and Training Council (POST) training academy, and not the CSP academy.

As of September 2012, there were 6,565 trained officers working in municipalities statewide.³⁰ The five largest departments were Hartford (481), Bridgeport (442), New Haven (418), Waterbury (282), and Stamford (275). The departments with the five fewest members were Portland (12), Coventry (14), Canton, Granby, Middlebury, Thomaston, and Weston (15), East Hampton and Plainfield (16), and Easton and Redding (17). The average size of police departments in the state was 75 members.

Number of municipal police officers by CSP troop. Figure III-2 shows the number of officers within municipal police departments by State Police troop. Troops H, G, and I had the most number of local police officers: Troop H (1,766 officers in 25 of the 26 towns in that troop), Troop G (1,650 officers located in the troop’s 14 towns), and Troop I (1,400 officers in 16 of the troop’s 19 towns). The troops with the fewest number of officers in municipal police departments were Troops D (16 officers in 1 of its 13 towns), K (28 officers in 2 of its 14 towns), and C (59 officers in 2 of 10 towns). As noted earlier, Troops G, H, and I are considered primarily highway troops and focus their efforts mostly on patrolling major interstate highways traversing their troop areas.



Percent of CSP troop population covered by local police departments. Table III-2 Shows the total population by troop, along with the total population covered by local police departments within each troop. Also shown in parentheses are the total number of towns in each troop and the number of those towns with their own police departments. Overall, local police departments cover just over 84 percent of the state’s population. This ranges from a low of 17.3 percent of the population within Troop D, to 100 percent within Troop G. (Additional population-related information is provided earlier in the report.)

³⁰ Figure as of September 2012. Ninety-nine additional POST-trained officers were located in Putnam, Willimantic, Groton City, and Groton Long Point.

Table III-2. Percent of Population Covered by Local Police Departments (by CSP Troop)			
State Police Troop	Troop Population (# of towns)	Population of Towns w/ Local PDs (# of towns)	% of Total Troop Population Covered By Local PDs
D	88,843 (13)	15,405 (1)	17.3%
K	118,795 (14)	22,467 (2)	18.9%
C	133,554 (10)	41,614 (2)	31.2%
B	79,170 (13)	47,625(2)	60.2%
E	231,970 (14)	146,290 (5)	63.1%
L	160,810 (14)	113,413 (5)	70.5%
F	213,164 (17)	154,227(7)	72.4%
A	394,086 (16)	340,048 (10)	86.3%
I	651,751 (19)	630,734 (16)	96.8%
H	819,431 (25)	814,283(24)	99.4%
G	682,523 (14)	682,523 (14)	100.0%
Totals	3,574,097 (169)	3,008,629 (88)	84.2%

Area covered. The total geographic area (land and water) by troop, along with the area covered by the 88 towns with local police departments within each troop, is provided in Table III-3. Municipal police departments cover just under half (48.2 percent) of the state’s geographic area. At the State Police troop level, the area covered by towns with municipal police departments ranged from a low of 9.5 percent in Troop D, to 100 percent in Troop G.

Table III-3. Percent of Total Area Covered by Local Police Departments (by CSP Troop)			
State Police Troop	Troop Area (Sq. Miles)	Area of Towns w/ Local PDs	% of Total Troop Area Covered By Local PDs
D	454.07	42.98	9.5%
B	528.94	74.14	14.0%
K	433.95	61.75	14.2%
C	366.85	56.31	15.3%
L	425.08	115.9	27.3%
E	500.19	179.92	36.0%
F	470.81	223.98	47.6%
A	505.43	339.81	67.2%
I	379.75	333.99	87.9%
H	623.22	605.55	97.2%
G	432.23	432.23	100.0%
Totals	5,120.52	2,466.56	48.2%

Sources: POST and PRI staff analysis

Number of local police departments. Within the past decade, no municipal police departments have been disbanded, while one town created a municipal police force prior to not

having one (Redding, 2002). Moreover, the trend in the overall number of municipal police officers since 2008 was examined. This number, provided by POST, has steadily increased each of the years reviewed, from 5,436 in 2008, to 6,565 in 2012. This is a 20.7 percent increase and represents an average 13.8 more officers per municipality over the four years.

Policy 2: Resident State Trooper Program - With Local Special Constables

Policy 3: Resident State Trooper Program - Without Local Special Constables

C.G.S. Sec. 29-5 allows the DESPP commissioner to appoint state troopers to provide police services to a municipality, or two or more adjoining municipalities, without an organized police force, for which the municipalities pay a share of the costs.³¹ For FY 12:

- 55 towns participated in the Resident State Trooper program
- 34 of those towns hired “special constables” (i.e., Policy 2)
- the remaining 21 towns had resident troopers with no additional local police resources (i.e., Policy 3).

For analysis purposes, it is somewhat difficult to fully separate the two types of local law enforcement service. It is important to note, however, currently each town employing special constables also contracts for at least one resident trooper.

To participate in the Resident State Trooper program, a municipality must enter into a contract with the State Police for a particular number of resident troopers and is statutorily required to pay a portion of the costs associated with the services provided by the trooper, which is discussed in more detail below. As a result, there is a contractual obligation on the part of the State Police to provide trooper staffing resource to towns. Although not in statute, in practice, each contract establishes that the town “hereby delegates to the State Police the authority to supervise and direct the law enforcement operations of the appointed constables and police officers in the Town as set forth below” (e.g., what rules to follow).

Becoming a resident trooper. Resident troopers are State Police officers with the same powers and rights, and subject to the same rules and regulations of the Division of State Police, as all other state troopers.

The RST program is a specialized function within the Division of State Police. Troopers wanting to become part of the program must be designated as such by the department through a selection process. A state Trooper, Trooper First Class, or Sergeant may file an application at any time for transfer from their current duty to the RST program. Upon a vacancy within the program, as with any specialized unit, an announcement is made department-wide listing the minimum qualifications and/or special skills required for the position. Placement in the Resident

³¹ The RST program was established in 1947, and there were multiple years when a maximum number of resident troopers could only be appointed per statute. This number changed six times since the program's inception, ranging from 30 in 1959, to 68 in 1973. The law was modified in 1985 deleting the maximum number of resident troopers and requiring appointments be made within available appropriations by the State Police. Resident troopers in the past were required to be residents of the town where they patrolled, which is no longer the case.

State Trooper program is based on the person's qualifications in accordance with the position requirements determined by the department.

Duties and responsibilities. The services provided by a resident trooper to a municipality are the same as those provided by a local police department. This includes town patrol functions, enforcing motor vehicle laws, investigating crimes, investigating car accidents, participating in community policing activities and outreach, and applying for federal grants. It is important to keep in mind that the primary responsibility for the delivery of police services in a resident trooper town resides with CSP as long as a resident trooper is assigned to the town. While a resident trooper is on duty, the trooper is specifically assigned to that town, and may only leave the town boundary at the decision of the trooper commander (i.e., to assist in emergencies). If a resident trooper is not on duty, or if the trooper is on leave for up to five days, police services for that town are provided by the State Police troop patrol where the town is located. If a resident trooper is on leave for more than five days, another trooper is temporarily assigned as the resident trooper for that town. In towns where there are constables on duty when the RST is not, supervision of the constable(s) is provided by a CSP shift sergeant at the troop.

Resident troopers have the same use of barracks facilities and resources as all other troopers, namely criminal processing functions (e.g., holding cells, fingerprinting, and polygraph). As such, municipalities with resident trooper contracts do not have to provide those resources/services at the local level.

Municipal feasibility study required. The CSP Administration and Operations Manual for the Resident State Trooper program requires any town wanting to participate in the program to first complete a feasibility study prior to CSP assigning a resident trooper(s).³² The purpose of the study is to identify the level of service necessary to meet the town's needs, and then match those needs with the appropriate RST resources.

Feasibility studies may be completed in conjunction with the State Police or solely by the town, as long as the results are fully communicated with the department prior to the assignment of a resident trooper(s). Various factors about the town, such as size, geography, highways, accidents, and calls for service, should be examined as part of the study to determine what the adequate coverage should be for the town. Towns may also want to see general response time information from CSP to help them determine the number of RSTs needed and/or the shifts to be covered.

Municipal/State Police contract. Once a feasibility study is reviewed and approved by DESPP, a formal agreement is made between the town(s) and the commissioner. The agreement, approved by the Attorney General's office, cannot exceed two years before a new one is required. Contracts may be discontinued by either party upon adequate notice, which is typically 30 days. CSP told PRI staff that no town request to contract for the assignment of a resident trooper has been denied.

³² CSP Administration and Operations Manual (Resident State Trooper program): 15.3.2(a)(1)

Number of RST contract towns and RSTs. Table III-4 shows the total number of towns participating in the RST program along with the total number of resident troopers for FYs 2006-2012. The total number of RSTs is the average number of resident troopers paid for by municipalities during each fiscal year, given some towns may only require the service of an RST for part of the year. Towns may amend their contracts at any point during the two-year contract cycle to adjust the number of RSTs, including, for example, for additional coverage during different times of the year (e.g., shoreline towns during the summer months).

Table III-4. Resident State Trooper Program: FYs 2006-12.			
Fiscal Year	Number of Towns with RSTs	Total RSTs	Avg. Number RSTs per Town
2006	58	113	1.94
2007	58	115	1.98
2008	57	118	2.07
2009	57	120	2.10
2010	56	116	2.07
2011	56	117.5	2.09
2012	55	109.5	1.95

Source of data: CSP

The number of towns using resident troopers has decreased by three since FY 06, from 58 to 55 (5%). The number of resident troopers, however, increased from 113 in FY 06 to the seven-year high of 120 in FY 09, but then decreased to the seven-year low of 109.5 in FY 12. The average number of resident troopers used by any given town during the period analyzed ranged from a low of 1.94 to a high of 2.10.

Although three towns discontinued their participation in the RST program since FY 06, the 55 remaining towns contracting for resident troopers remained the same in each of the years examined.³³ Eighteen of these towns, however, changed their number of contracted resident state troopers; on average, four to seven towns made changes from the previous year.

Table III-5 shows the 55 towns participating in the RST program in FY 12, and the number of resident troopers by town. The table also includes, where applicable, the number of special constables employed by towns (note: a more detailed description of special constables is provided later in this section.) The number of RSTs by town ranged from low of one in 30 towns, to a high of nine in Mansfield, and the number of special constables ranged from one in several towns, to a high of 23 in Montville.

³³ The three towns discontinuing their participation in the resident trooper program were Thompson (September 2007), Kent (June 2009), and Sterling (August 2011). The population of the three towns totals 16,267, while their geographic area totals just over 125 square miles. The towns now fall under the patrol jurisdiction of the State Police. Newspaper accounts indicate the question of returning to a RST currently is under discussion in Kent.

Table III-5. Resident Troopers and Special Constables by Municipality: FY 12							
	Town	# RSTs	# Constables		Town	# RSTs	# Constables
1	Andover	1		31	Mansfield	9	3
2	Barkhamsted	1		32	Marlborough	2	2
3	Beacon Falls	1	10	33	Middlefield	1	2
4	Bethany	1	5	34	Montville	1	23
5	Bethlehem	1	6	35	New Fairfield	7	6
6	Bolton	2		36	New Hartford	2	2
7	Bridgewater	1	3	37	Norfolk	1	
8	Brooklyn	2		38	North Canaan	1	
9	Burlington	2	10	39	North Stonington	3	
10	Chaplin	1		40	Old Lyme	1	9
11	Chester	1	3	41	Oxford	5	8
12	Colchester	1	11	42	Preston	2	
13	Columbia	1		43	Prospect	1	16
14	Deep River	1	3	44	Roxbury	1	1
15	Durham	1		45	Salem	2	
16	East Granby	2	4	46	Salisbury	1	1
17	East Haddam	2	5	47	Sherman	1	
18	East Lyme	1	21	48	Somers	5	3
19	Ellington	5	12	49	Southbury	1	20
20	Essex	2	3	50	Sprague	1	
21	Griswold (Jewett City)	2		51	Stafford	4	6
22	Haddam	2		52	Tolland	5	
23	Harwinton	2		53	Washington	1	3
24	Hebron	2	5	54	Westbrook	3	5
25	Killingly	4		55	Woodbury	1	12
26	Killingworth	1			Totals	109.5	250
27	Lebanon	1	3				
28	Ledyard	1	21				
29	Lisbon	1					
30	Litchfield	1.5	3				

Constable data current as of September 2012
Sources of data: CSP and POST

Percent of CSP troop population covered by resident troopers. The total population by troop, along with the total population covered by resident troopers within each troop, is provided in Table III-6. Overall, resident troopers patrol towns with just under 13 percent of the state's population for some part of a 24-hour day.

At the individual troop level, 60 percent of the population in Troop C is patrolled by resident troopers, followed by 56 percent in Troop K. Again, there are no resident troopers in Troop G and only one town in Troop H is covered, so little to none of the population in those troops is covered by RSTs. However, since 30 towns contract for just one resident state trooper, and another 14 contract for two, these towns and others that do not contract for enough resident troopers for continuous assignments rely on their State Police troops for police coverage when there is no RST (or special constable) on duty. In towns where there are constables on duty

without a resident trooper, the special constables provide coverage under the supervision of the troop.

State Police Troop	Troop Population	Population of Towns w/ RSTs	% of Total Troop Population Covered by RSTs
C	133,554	80,728	60.4
K	118,795	66,511	56.0
E	231,970	83,077	35.8
D	88,843	27,885	31.4
F	213,164	56,531	26.5
L	160,810	40,569	25.2
B	79,170	19,534	24.7
A	394,086	54,038	13.7
I	651,751	21,017	3.2
H	819,431	5,148	0.6
G	682,523	0	0.0
Totals	3,574,097	455,038	12.7

Source: PRI staff analysis

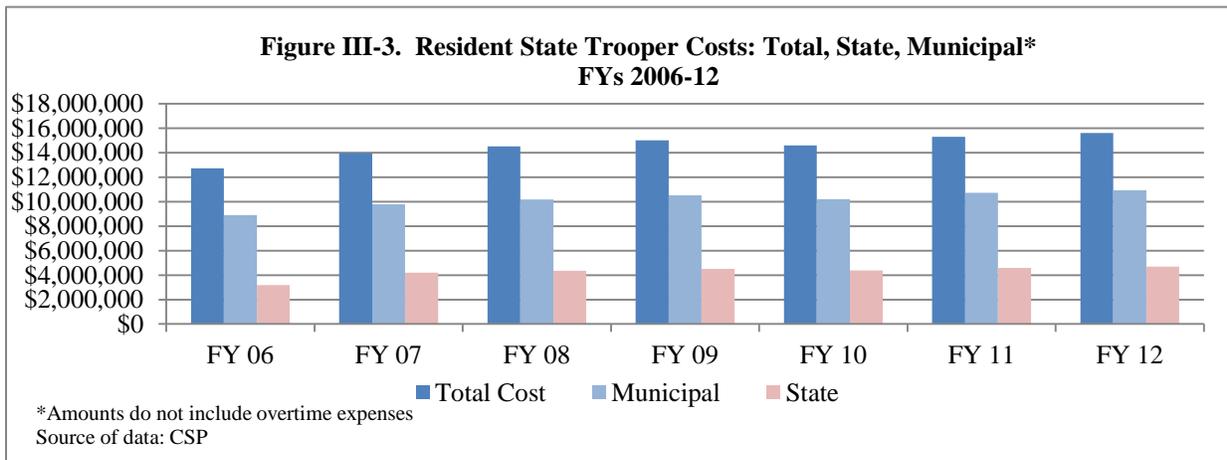
Area covered. The total geographic area by troop, along with the area covered by resident troopers within each troop for some part of a 24-hour day, is provided in Table III-7. Resident troopers, when they are on duty, cover 34.1 percent of the state’s square mileage. Over 70 percent of Troop K’s area is patrolled by resident troopers for some part of a 24-hour day, followed by 56 percent of Troop E.

State Police Troop	Troop Area (Sq. Miles)	Area of Towns w/ RSTs	% of Total Troop Area Covered by RSTs
K	433.95	304.49	70.2
E	500.19	280.48	56.1
L	425.08	213.3	50.2
F	470.81	212.36	45.1
C	366.85	207.12	56.5
B	528.94	202.98	38.4
A	505.43	165.62	32.8
D	454.07	98.66	21.7
I	379.75	45.76	12.1
H	623.22	17.67	2.8
G	432.23	0	0.0
Totals	5,120.52	1,748.44	34.1%

Sources: PRI staff analysis

Cost. State law currently requires each town participating in the resident trooper program to pay 70 percent³⁴ of the compensation and other expenses of each resident trooper detailed to a town. The amount charged has changed over time. For example, the town share of a resident trooper in 1977 was 60 percent, which increased to 70 percent in 1991, then to 75 percent in 1992, only to decrease that same year to the present 70 percent level. In addition, effective July 1, 2011, each town is required to pay one hundred percent of any overtime costs of resident troopers and the portion of fringe benefits directly incurred with such overtime costs.³⁵

Figure III-3 shows the costs associated with the Resident State Trooper program for FYs 2006-12. The program’s total cost, municipal share, and the amount paid for by the state are provided in the figure by year.



Total cost. The total cost of the Resident State Trooper program ranged from a low of \$12.7 million in FY 06, to a high of \$15.6 million in FY 12. The municipal share increased from \$8.9 million to \$10.9 million over the seven years, while the state’s share rose from \$3.2 million to \$4.7 million.

Average cost. The average total cost per resident trooper in FY 06 was \$112,673, which rose to \$141,283 in FY 12, an increase of just over 25 percent. The average town share per trooper was \$98,898 in FY 12, up from \$78,871 in FY 06. And the state’s average per-trooper share increased from \$33,802 in FY 06 to \$42,385 in FY 12. Towns may request a trooper of a particular rank up to, and including, a sergeant (and need to pay a higher cost based on a higher salary). Moreover, it is State Police practice to require towns with four or more resident troopers also contract for a full-time resident trooper sergeant, who has supervisory responsibilities of the town’s resident troopers (there were 13 RST sergeants assigned during the 2011-13 contract cycle). The supervision of resident troopers in all other circumstances is the responsibility of the barracks sergeant on duty during the shifts when RSTs are also on duty.

³⁴ C.G.S. Sec. 29-5

³⁵ Per P.A. 11-51 §168, amending C.G.S. Sec. 29-5

Special constables. As previously referenced, towns may employ special constables to provide law enforcement services. Table III-5 above, shows of the 55 towns contracting for RSTs, 34 towns employ 250 special constables who, pursuant to the RST contract, work under the supervision of the resident trooper or (resident trooper sergeant). C.G.S. Sec. 7-92 further says the chief executive officer of any municipality may appoint persons to serve as special constables (note: special constables are different than elected constables, in that special constables are trained municipal law enforcement officers and elected constables are not). The key function of special constables is to preserve the public peace within the municipality. Such constables may serve terms of not more than two years.

A special constable has the authority to make arrests for commission of crime within the municipality.³⁶ Special constables who perform criminal law enforcement duties are considered peace officers for purposes of the penal code.³⁷ This means they can use physical force and, in certain circumstances, deadly physical force to make an arrest or prevent an escape.³⁸ With exceptions, they may arrest, without a previous complaint or warrant, anyone apprehended in the act or upon the speedy information of others.³⁹

Two important distinctions between special constables and local police officers are: 1) special constables have no police powers outside of their municipal jurisdiction, whereas police officers can make felony arrests in any part of the state; and 2) special constables cannot execute search warrants within or outside of their jurisdiction.

Special constables complete the requirements of the Police Officer Standards and Training Council, similar to municipal police officers. As noted, such constables work under the supervision of a Resident State Trooper (or RST Sergeant) contracted by the town (a contract and policy requirement of the Connecticut State Police if the town wishes its constables to be dispatched by the State Police or have access to CSP radio and computer systems.) Many medium-sized towns have adopted the policy of using resident troopers and constables as a more cost effective way of providing increased police patrols, given the State Police retain primary responsibility for providing supervision, dispatch, and criminal processing functions.

Table III-8 summarizes the use of special constables in Connecticut, based on POST data. Although not a statutory requirement, currently all the towns with special constables have resident troopers. In addition, as the table shows, while 9.1 percent of the state's population is located in towns with constables, almost 22 percent of the state's geographic area is covered by constables. Although not shown in the table, the total number of constables steadily increased for FYs 2008-12, from 205 to 250 (almost 22 percent). An increased number of constables helps augment State Police patrol staffing resources dedicated to municipal law enforcement, but also

³⁶ Appointed constables who perform criminal law enforcement duties are defined as police officers for purposes of the POSTC training requirements (C.G.S. Sec. 7-294a). This means they must satisfy these requirements in order to perform such duties. The law does not define criminal law enforcement duties, but the attorney general has said that the terms law enforcement duties, police duties, or police functions encompass one or more of the following activities: "(1) enforcement of criminal or traffic laws, (2) preservation of public order, (3) the protection of life or property; and (4) the prevention, detection or investigation of crime." (Op. Attorney General, Sep. 21, 1993, p. 4)

³⁷ C.G.S. 53a-3(9).

³⁸ C.G.S. 53a-22.

³⁹ C.G.S. 54-1f(a).

requires supervisory resources from the State Police. In addition, according to CSP, just under 60 percent of the constables are full-time, while the other 40 percent are part-time.

Table III-8. Summary of Special Constables in CT*									
Troop	# Towns	# Towns w/ Constables	# of Constables	Total Pop 2010	Const. Pop.	% Pop. Covered	Town Area Sq. Miles	Const. Area	% Area Covered
A	16	5	38	394,086	50,457	12.8	505.43	142.22	28.1
B	13	2	3	79,170	10,711	13.5	528.94	98.25	18.6
C	10	4	24	133,554	65,676	49.2	366.85	167.46	45.6
D	13	0	0	88,843	0	0	454.07	0	0
E	14	3	65	231,970	53,781	23.2	500.19	126.18	25.2
F	17	6	25	213,164	34,272	16.1	470.81	106.49	22.6
G	14	0	0	682,523	0	0	432.23	0	0
H	25	1	4	819,431	5,148	0.6	623.22	17.67	2.8
I	19	3	31	651,751	21,017	3.2	379.75	45.76	12.1
K	14	5	26	118,795	48,592	40.9	433.95	222.34	51.2
L	14	5	34	160,810	34,927	21.7	425.08	182.16	42.9
	169	34	250	3,574,097	324,581	9.1	5,120.52	1,108.53	21.6

*Currently all special constables are in towns that contract with the Resident State Trooper program.
Source: POST; PRI staff analysis

Policy 4: Towns Patrolled by CSP Only

Twenty-six towns throughout the state do not have an organized local structure to provide law enforcement services, either through a municipal police department or a Resident State Trooper(s). As a result, the Connecticut State Police include those towns as part of its troop patrols. Although there is no law specifying it is the responsibility of the State Police to do so, CSP believes, as the “protector of last resort” in the state, its responsibility is to provide law enforcement services in municipalities where none exist, even though the decision not to provide police protection is a municipal one.

Table III-9 provides a summary of select characteristics of the towns patrolled by the Connecticut State Police. Overall, the 26 towns with State Police coverage are spread across 7 of CSP’s 11 troops. The towns account for just over 3 percent of the state’s population, meaning the towns with no formal local police function have relatively small populations. The same holds true for total geographic area, with the 26 towns accounting for just under 18 percent of the state’s total square mileage. At the individual troop level, the nine CSP-patrolled towns in Troop D account for over half of the population, and almost 70 percent of the total area, of the 26 towns patrolled by the State Police.

It is difficult to quantify the staffing and financial resources devoted by the State Police to patrolling towns without any organized police presence. At the same time, unlike towns participating in the RST program that share the cost of their resident troopers with the state, towns fully under the coverage of the State Police do not provide any reimbursement for the patrol services provided by the State Police. CSP assumes this cost as part of its overall patrol function.

Table III-9. Summary of Towns with CSP Patrol Only							
Troop	# Towns	Total Pop 2010	CSP Pop	% Pop Covered	Sq. Mile	CSP Area	% Area Covered
A	0	394,086	0	0.0	505.43	0.00	0.0
B	6	79,170	12,011	15.2	528.94	251.82	47.6
C	3	133,554	11,212	8.4	366.85	102.82	28.0
D	9	88,843	45,553	51.3	454.07	312.43	68.8
E	1	231,970	2,603	1.1	500.19	39.79	8.0
F	1	213,164	2,406	1.1	470.81	34.47	7.3
G	0	682,523	0	0.0	432.23	0.00	0.0
H	0	819,431	0	0.0	623.22	0.00	0.0
I	0	651,751	0	0.0	379.75	0.00	0.0
K	3	118,795	29,817	25.1	433.95	67.71	15.6
L	3	160,810	6,828	4.2	425.08	95.88	22.6
	26	3,574,097	110,430	3.1	5,120.52	904.92	17.7

Source: PRI staff analysis

Statewide Summary

Table III-10 provides a summary, by CSP district and troop, of the number of officers by the various types of policies currently used by municipalities to provide law enforcement services (see Appendix D. for a complete town-by-town listing). The table shows the CSP Central District had highest percentage of local police departments (77 percent), while the Eastern District had the lowest, with 20 percent. The percentage of towns using resident troopers and special constables was relatively equal across all three CSP districts: Western District (21.1 percent), Central District (16.4 percent), and Eastern District (23.5 percent). The Eastern District had the highest percentage of towns with resident troopers only and no special constables, with 26 percent, while the Western District had 9 percent, and the Central District had 5 percent. The Eastern District also had the largest percentage of towns solely relying on coverage from the State Police (31.4 percent), while the Central District only had 1.6 percent of its towns using only CSP coverage.

**Table III-10. Municipal Police Protection Policies:
Totals by Troop, CSP District, Statewide.**

	# Towns	Local PD	%	RST w/ Constables	%	RST w/o Constables	%	CSP Only	%
WESTERN DISTRICT									
Troop A	16	10	62.5	5	31.3	1	6.3	0	0.0
Troop B	13	2	15.4	2	15.4	3	23.1	6	46.2
Troop G	14	14	100	0	0.0	0	0.0	0	0.0
Troop L	14	5	35.7	5	35.7	1	7.1	3	21.4
Totals	57	31	54.4	12	21.1	5	8.8	9	15.8
CENTRAL DISTRICT									
Troop F	17	7	41.2	6	35.3	3	17.6	1	5.9
Troop H	25	24	96.0	1	4.0	0	0.0	0	0.0
Troop I	19	16	84.2	3	15.8	0	0.0	0	0.0
Totals	61	47	77.0	10	16.4	3	4.9	1	1.6
EASTERN DISTRICT									
Troop C	10	2	20.0	4	40.0	1	10.0	3	30.0
Troop D	13	1	7.7	0	0.0	3	23.1	9	69.2
Troop E	14	5	35.7	3	21.4	5	35.7	1	7.1
Troop K	14	2	14.3	5	35.7	4	28.6	3	21.4
Totals	51	10	19.6	12	23.5	13	25.5	16	31.4
State Totals	169	88		34		21		26	

Regionalization

State law allows two or more municipalities to jointly perform any function that each municipality may legally perform separately by entering into an interlocal agreement.⁴⁰ Statute also allows the chief executive officer of any municipality to request any other municipal chief executive officer to furnish police assistance when necessary to protect the safety or well-being of the municipality.⁴¹

Municipalities may make police services available to other municipalities. Any police officer provided from one municipality to another has the same powers, duties, privileges and immunities as are conferred on the law enforcement officers of the municipality requesting assistance. The municipality supplying police assistance must be reimbursed for all expenditures incurred in providing the assistance by the municipality making the initial request. In addition, the chief executive officer of any municipality which provides police protection solely by a constabulary force may enter into an agreement with one or more municipalities to furnish or receive police assistance.

⁴⁰ C.G.S. Sec. 7-148cc

⁴¹ C.G.S. Sec. 7-277a

The Connecticut Chiefs of Police Association provided information as to the types of regionalized law enforcement efforts statewide. The number of such regionalized law enforcement efforts and the services offered are varied, as provided in Table III-11.

Table III-11. Regionalized Law Enforcement Efforts (Based on Connecticut Police Chiefs Association Regions)	
<p>Capitol Region (Avon, Berlin, Bloomfield, Bristol, Canton, Coventry, Cromwell, East Hartford, East Hampton, East Windsor, Enfield, Farmington, Glastonbury, Granby, Hartford, Manchester, Middletown, New Britain, Newington, Plainville, Rocky Hill, Simsbury, Southington, South Windsor, Suffield, Vernon, West Hartford, Wethersfield, Windsor, Windsor Locks, Central CT State University, State Capitol, UCONN Health Center)</p>	<ul style="list-style-type: none"> • Capital Region Emergency Services Team • Metro Traffic Services • MTS (Commercial Vehicle Inspection Team) • East Central Narcotics • North Central Municipal Accident Reconstruction • North Central Municipal Emergency Services Team • MidState Accident Reconstruction • MidState Narcotics • MidState Major Crimes
<p>Fairfield County Region (Bethel, Bridgeport, Brookfield, Danbury, Darien, Easton, Fairfield, Greenwich, Monroe, New Canaan, New Milford, Newtown, Norwalk, Redding, Ridgefield, Shelton, Stamford, Stratford, Trumbull, Weston, Westport, Wilton)</p>	<ul style="list-style-type: none"> • Southwest Emergency Response Team • Non-Emergency Interagency Agreements (includes joint operations for DWI checkpoints, accident investigation, and traffic enforcement) • Regional Traffic Enforcement Units
<p>South Central Region (Ansonia, Branford, Derby, East Haven, Guilford, Hamden, Meriden, Milford, New Haven, North Haven, North Branford, Orange, Seymour, Wallingford, West Haven, Woodbridge, Southern CT State University, University of New Haven, Yale University)</p>	<ul style="list-style-type: none"> • Crisis Intervention Team • Active Shooter Training • Emergency Response Team • Entry-Level Recruitment and Testing • Re-Certification Training for Field Officers and Executive Managers • Voice Communications Systems
<p>East Region (Clinton, Groton City, Groton Long Point, Groton Town, Madison, New London, Norwich, Old Saybrook, Plainfield, Putnam, Stonington, Waterford, Willimantic, Eastern CT State University, UCONN-Storrs)</p>	<ul style="list-style-type: none"> • Monthly Planned Trainings (e.g., active shooter) • Coordinated Maritime Activities • Work with US Coast Guard on Port Security • Police Policy and Procedure Group
<p>West Region (Ansonia, Cheshire, Middlebury, Middletown, Naugatuck, New Milford, Plymouth, Southington, Thomaston, Torrington, Waterbury, Watertown, Winchester/Winsted, Wolcott)</p>	<ul style="list-style-type: none"> • Regional Accident Investigation Team and Traffic Squad (Watertown, Wolcott, Naugatuck, Middlebury) • Regional SWAT Team (Waterbury, Watertown, Wolcott, Middlebury) • Torrington has own SWAT, Traffic, Accident Investigation Teams
<p>Source: Connecticut Police Chiefs Association</p>	

Specialized CSP services. As noted earlier, State Police specialized services may be requested by any municipality, including those operating their own police departments, regionalized law enforcement services, and the various state’s attorneys for particular cases. Although it is difficult to determine the full impact regionalized law enforcement services have on State Police staffing, committee staff obtained information about “outside assists” provided by the CSP’s Emergency Services Unit (e.g., bomb squad, canine squad, dive team, and aerial patrol), Major Crimes Unit within each CSP district (e.g., major crime van and investigators), and Traffic Services Unit (e.g., vehicle collision analysis/reconstruction, and breath alcohol

testing vehicle). “Outside assists” is the term used to describe those instances when State Police services are provided to entities normally not under direct CSP jurisdiction, namely municipalities with their own police departments.

Table III-12 summarizes the hours devoted by the Emergency Services, Major Crimes, and Traffic Services units to provide municipalities with specialized law enforcement efforts for the one-year period September 2011-2012 (the municipalities each has its own police department, and do not fall under the direct jurisdiction of the State Police.)⁴² The information is presented as a proxy to show the level of staff resources CSP devotes to assisting the municipalities with their own police departments (not included in the table is the time spent by individual troops or other specialized units in assisting such municipalities.)

Table III-12. Specialized Units: Hours Spent Assisting Municipalities Not Under CSP Jurisdiction (9/2011 to 9/2012)			
Unit	Regular Hours	Overtime Hours	Total Hours
Western District Major Crimes	3,593	8,310	11,903
Central District Major Crimes	4,734	2,462	7,196
Eastern District Major Crimes	2,340	1,360	3,700
Emergency Services	Undetermined	3,071	3,070
Traffic Services	1,245	1,526	2,771
Totals	11,912	16,729	28,640

Note: Other specialized units (e.g., Fire/Explosives Investigation, Sex Offender Registry, Background Investigations, State Licensing and Firearms) also provide some services for municipalities statewide); more general “assists” by the Traffic Services Unit are not included in the analysis (e.g., dignitary escorts, Department of Corrections escorts). Emergency services only provided overtime hours, and not regular hours spent assisting municipalities.
Source of data: CSP

As the table shows, CSP provided over 28,600 work hours of specialized services to municipalities with their own police departments for the one-year time period. Specifically, the Western District Major Crimes Unit provided almost 12,000 hours to assisting various local police departments. During the same period, Major Crimes in the Central and Eastern Districts provided 3,700 and 3,070 hours respectively, and the Traffic Services Unit provided just under 2,800 hours of assistance.

Other states. Although not directly related to regionalization, committee staff queried several other states as to the relationship between their State Police departments and municipalities. Specifically, all the New England states, Maryland, and Alaska were asked if there are instances where the State Police force has primary jurisdiction in municipalities/towns without their own local police department. And, if yes, the degree to which this occurs and if municipalities pay for such services. Of the seven states, three responded, as summarized below:

- **Maine:** most, but not all, municipalities have their own police forces. The State Police shares jurisdiction with county sheriff departments and coverage of municipalities lacking organized police departments is made with many sheriff

⁴² Note: each of the three units also provide specialized services to municipalities under CSP’s jurisdiction, including those with resident troopers.

departments to avoid duplication. Call sharing agreements exist with most of Maine's 16 counties. There is no cost sharing or charge for State Police services.

- Maryland: there is a local division of the State Police department, and the division may assume law enforcement jurisdiction in towns without their own police departments. This occurs in three towns and one county, which is in the last year of a three-year phase out program. Municipalities/counties pay the total direct costs of the State Police services, plus 26 percent of indirect costs.
- Vermont: towns without their own police department defer to the services of the State Police. State troopers provide law enforcement services to approximately 200 towns, covering 90 percent of the state's land mass and 50 percent of its population. Towns' tax dollars pay for the services.

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Connecticut State Police Training Academy Graduates and Staffing Levels

Summary of CSP Staffing Levels

Staffing Levels

- Due to monthly variability, PRI adopted a methodology of calculating staffing levels by using the average of the 12 months within a given fiscal year
 - The number of CSP sworn personnel declined 12-14% from FY 09 to FY 12
- There was an average of 42-73 active sworn personnel per Troop in FY 12, accounting for slightly more than half of all sworn CSP personnel
- Other sworn personnel are part of the resident state trooper program (10-11%) or serving in one of the approximately 380 positions across a myriad of other units such as Major Crimes, the, Bureau of Criminal Investigations, and Emergency Services Unit
- Fewer than five percent of sworn personnel have management roles
- Projecting the time at which an officer will terminate service with CSP is somewhat challenging and may be impacted by the economy, retirement incentive programs, etc.
 - In one class examined, almost one quarter of the 1988 graduates left CSP within the first eight years, followed by no additional losses until the 20 year anniversary was reached, at which point a full 25% left on their 20th year of service, and an additional 22% after their 21st year of service

Overtime

- Regular duty overtime decreased 54 percent from FY 09 to FY 12, most of the decrease occurring in FY 11
- Although the number of active sworn personnel remained constant at 1,092 in FYs 10 and 11, the amount of regular duty overtime was reduced by 288,557 hours (48 percent). CSP personnel interviewed by PRI staff attributed the decrease to a policy decision made to sharply limit overtime
- The average number of overtime hours per dispatcher more than doubled in the consolidated dispatch (Troops A, B, L) in the months following consolidation

This chapter provides background information on the Connecticut State Police training academy and its graduates from the 107th-122nd Training Troops. Staffing level trends are also provided for sworn personnel in patrol and resident state trooper positions and those working in

specialized units. A description of officer rank, management levels, and personnel on leave or light duty is followed by length of service and reasons for leaving CSP. The chapter concludes with an analysis of overtime worked by sworn personnel and dispatch operators. (See Appendix E for a description of the recruitment and selection process and post-academy training requirements.)

State Police Training Academy

Recruitment training program. The Recruit Training Program is a 28-week, Monday thru Friday, live-in paramilitary style training Academy. The program focuses on academics, physical fitness, defensive tactics, and practical law enforcement policies, as well as standard operating procedures within the Connecticut State Police.

As reported by the State Police, the Recruit Training Program implements and adopts innovative training practices to maintain the highest caliber of entry level troopers. This includes the use of a problem solving model of training that complements the traditional classroom curriculum. The problem solving model, utilized via experiential training, teaches recruits to analyze all resources when confronted with police-related issues on calls for service and to choose the most appropriate course of conduct for a given situation with emphasis on maintaining high ethical standards.⁴³

Academy graduates. At the end of six months, Trooper Trainee candidates who complete training, graduate from the Academy and begin their field training at the barracks to which they are assigned. Over time, CSP has increased the size of the incoming Trooper Trainee classes in order to meet staffing requirements.⁴⁴ Whether the initial class size begins with 110 or 60 candidates, though, there is attrition throughout course of the Academy. Candidates typically drop out within the first seven to ten days; however, it is not uncommon to lose trainees throughout the duration of the Academy. There could be several reasons that a trooper candidate leaves the Academy once an offer has been made, such as: 1) the candidate is not present on the first day of the Academy; 2) the candidate is dismissed from the Academy; or 3) the candidate elects to withdraw from the Academy.

Figure IV-1 shows the number of Trooper Trainee candidates that graduated from the Academy from 2002 to 2010. Of 644 offers to enter the academy made, 10 percent of these applicants did not enroll; another 47 (7%) declined; and 19 (3%) deferred enrollment. Once enrolled at the Academy, only 1 percent of enrollees were dismissed. Additionally, one in five Trooper Trainee candidates withdraws from the Academy once enrolled in the training program. Given the relatively sizeable attrition rate, significantly more applicants than are ultimately needed would have to be offered spots in order to end up with the targeted number of new CSP. The Academy provides an exit exam to anyone who chooses to leave before the class is completed. This information is kept and reviewed on an as-needed basis.

⁴³ Connecticut State Police Training Academy and Range Staffing Analysis, September 2012.

⁴⁴ This has not been done every year and depends on the number of Trooper Trainee positions approved by the Office of Policy and Management.

Figure IV-1. Reasons why Trooper Trainee Candidates Did Not Graduate from the Academy 2002-2010

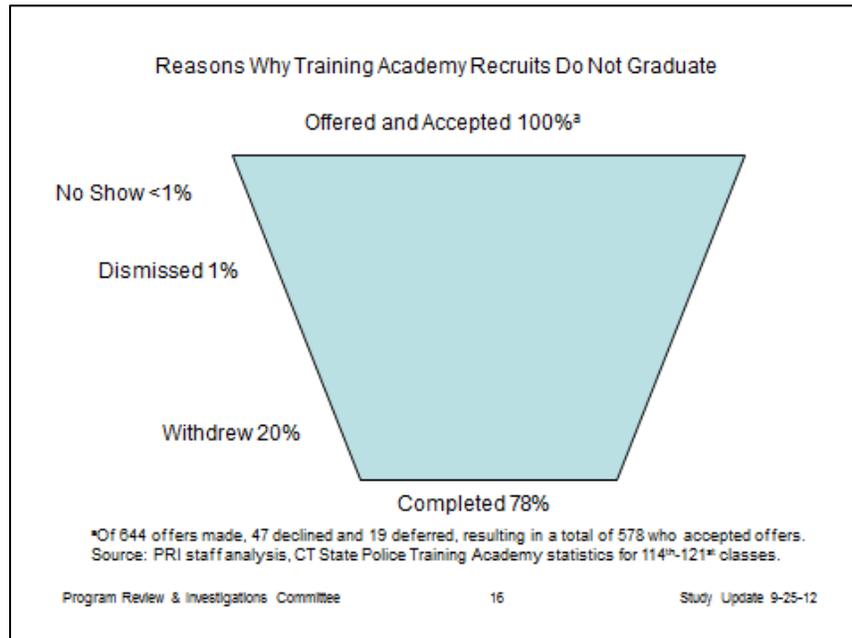


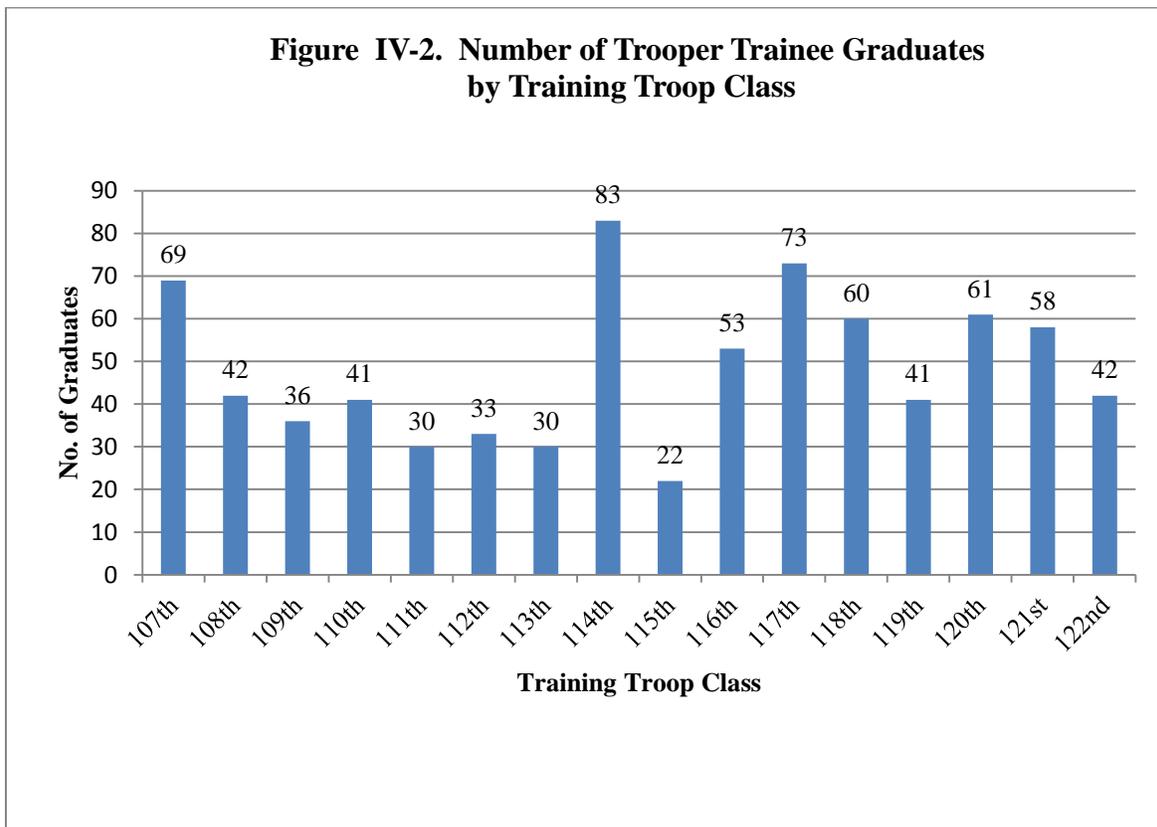
Table IV-1. shows the number of graduates in the 16 training classes that concluded from July 1998 through December 2012 (the 107th through the 122nd) and the number of trainees assigned to each troop.

Table IV-1. Number of New Graduates by Troop Assignment													
		Troop Assignment											
Training Troop	Graduation Date	A	B	C	D	E	F	G	H	I	K	L	Total
107 th	Jul-98	2	3	7	6	7	9	7	4	8	9	7	69
108 th	Mar-99	6	5	1	5	6	4	3	3	3	3	3	42
109 th	May-00	3	3	4	5	3	2	4	0	1	6	5	36
110 th	Jun-00	5	2	1	4	5	4	8	5	3	3	1	41
111 th	Oct-00	2	4	2	1	4	5	4	3	0	0	5	30
112 th	Feb-01	10	1	0	0	5	0	6	3	8	0	0	33
113 th	Jun-01	2	2	1	7	0	0	5	1	4	2	6	30
114 th	Jan-02	10	5	13	2	3	12	5	4	7	11	11	83
115 th	Dec-02	2	1	1	3	2	2	4	4	1	1	1	22
116 th	Apr-05	8	4	4	6	3	4	10	7	4	1	2	53
117 th	Jul-06	7	5	8	5	8	6	6	8	6	5	9	73
118 th	Jul-07	7	7	7	2	5	7	4	4	4	6	7	60
119 th	May-08	3	3	4	2	4	4	6	3	2	5	5	41
120 th	Apr-09	5	3	7	6	5	5	8	8	4	5	5	61
121 st	Nov-10	6	1	6	6	5	4	11	4	4	7	4	58
122 nd	Dec-12	3	5	3	5	6	6	4	3	3	3	1	42
	Total	81	54	69	65	71	74	95	64	62	67	72	774
	Average	5	3	4	4	4	5	6	4	4	4	5	

The table shows the number of graduates assigned to each barracks over the course of the fourteen years evaluated. Troop G had the highest number of Trooper Trainees assigned to its barracks over the last fourteen years, with 95 graduates, and Troop A had the second highest number of troopers received at 81 graduates. Troop B received the fewest number of Academy graduates, totaling 54 over the time period.

As further shown in the table, the State Police have not commenced a training troop every year since 1998, but in some years graduated several trainee classes. The three classes in 2000, for example, were in response to the 1998 legislation establishing the number 1,248 as the required minimum, then with an effective date of July 1, 2001. The table also shows that in some years, several troops did not receive any new troopers.

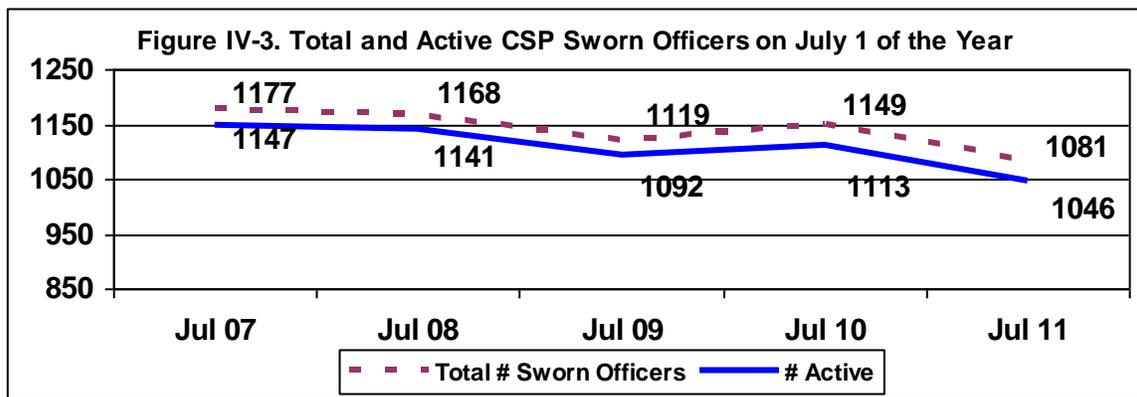
Figure IV-2. provides a visual of the number of Trooper Trainee graduates by training class. The 114th (January 2002) had the highest number graduated over the time period with 83 troopers graduated. The 117th training class (July 2006) was second, with 73 officers graduated. Although the number of graduates per class varies over the time frame, each class did not begin with the same starting number of Trooper Trainee candidates.



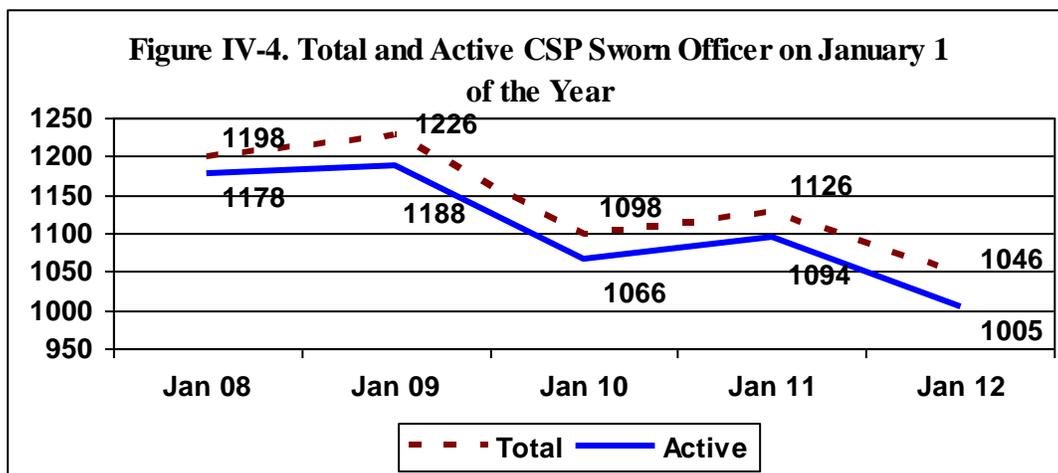
Staffing Levels

As directed by Public Act 12-1 (June 12 Special Session), and in order to understand the current sworn staffing situation at the Connecticut State Police, staffing level trends were examined. Data for the analyses in this chapter were taken from CORE-CT, the state information system containing employee information on positions.

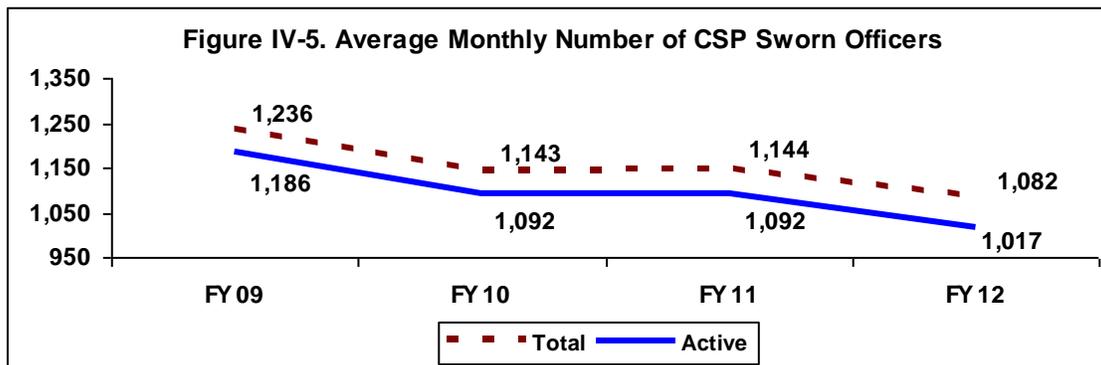
Total number of CSP sworn personnel. The number of CSP sworn personnel varies from month to month, meaning that depending on which month is chosen, the trend in the number of CSP sworn personnel varies as well. The total number of CSP sworn personnel—including officers on leave and light duty—for every July 1 between 2007 and 2011, for example, is shown in Figure IV-3. The dotted line shows an eight percent decline in the total number of CSP sworn officers. Considering only active CSP sworn officers (not on leave or light duty), the solid line shows a similar decline (9%) during the same time period.



Using a different month of the year, the same information is shown for every January 1 between 2008 and 2012 (Figure IV-4). Here the dotted line shows a 13 percent decline in the total number of CSP sworn officers. Considering only active CSP sworn officers (not on leave or light duty), the solid line shows a somewhat similar decline (15%) during the same time period.



The differences found, whether July or January annual trend data is examined, demonstrates the variability in staffing levels from month to month. Given this variability, PRI adopted a methodology for this study of using the average of the monthly staffing levels to represent staffing levels for the fiscal year. Applying this strategy, Figure IV-5 shows a 12 percent decline in total number of CSP sworn officers, and a 14 percent decline in active officers from FY 09 to FY 12, the period used for the study analyses.



Number of sworn personnel in the troops. The Administration and Operations Manual (A&O Manual) states: “the patrol force is often called the backbone of the department and is the function of the department requiring the largest allocation of troopers.”⁴⁵

Figure IV-5 shows there is a difference between the number of sworn personnel *assigned* to a position and the number of sworn personnel *active* in a position. Sworn personnel may not be active in an assigned position due to:

- military leave;
- workers’ compensation leave;
- family medical leave (FMLA); or
- other leave.

Sworn personnel may also not be active in an assigned position due to injuries that occurred either on or off the job, and require an assignment to “light duty.”

Table IV-2 shows the average number of active sworn personnel for each Troop for FYs 09-12. Overall, there was an eight percent decline in the total number of active sworn personnel in the Troops from 704 to 650. While the overall number decreased, there was variability among the individual Troops. Increasing trends appear for Troops A, C, and H. Decreasing trends appear for Troops B, D, E, F, I and K.

⁴⁵ A&O Manual 15.3.1b.

Table IV-2. Number of Active Sworn Personnel by Troop: FY 09 –FY 12^{1,2}				
	FY 09	FY 10	FY 11	FY 12
Troop A	69	63	69	70
Troop B	50	49	46	42
Troop C	70	71	73	73
Troop D	63	61	61	56
Troop E	70	64	62	58
Troop F	68	63	59	53
Troop G	69	73	75	70
Troop H	67	67	64	69
Troop I	52	50	47	42
Troop K	67	66	64	60
Troop L	59	56	59	57
Total	704	683	679	650
¹ Excludes personnel on light duty.				
² Includes all sworn personnel in the Troop, from Trooper Trainees to Lieutenants.				
Source: CORE-CT.				

Number of patrol and resident state troopers. Focusing on active patrol and resident state troopers rather than all active sworn personnel, there was a three percent decrease in the number of active patrol and resident state troopers. Table IV-3 shows the annual average number of active patrol and resident state troopers in each of the current Troops and the changes in staffing level from FY 09 to FY 12⁴⁶. The number of patrol and resident state troopers in Troop H increased due to the merger with Troop W. On the other hand, Troops F, B, I and E each experienced at least a 10 percent decrease in the number of active patrol and resident state troopers.

⁴⁶ Troop W, operating at Bradley International Airport, was merged with Troop H in March 2012. Prior to the merger, Troop W had a relatively different role from the other Troops, funded in part by Federal dollars and rarely responding to calls for service outside of the airport. It also did not have any Resident State Troopers.

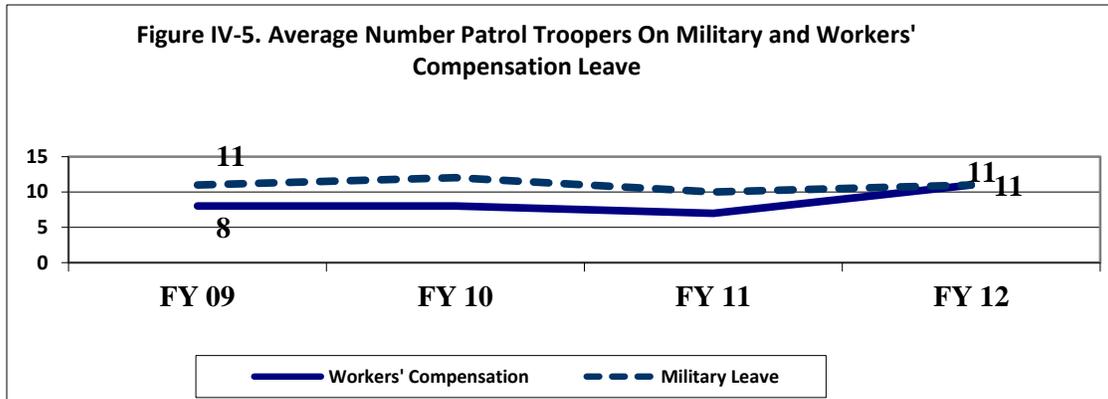
Table IV-3. Average Number of Active Sworn Staff in Patrol and RST Troops				
Unit	FY 09	FY 10	FY 11	FY 12
RSTs				
Troop A	15.92	15.58	16.58	15.17
Troop B	6.67	5.58	5.83	5.75
Troop C	29.75	28.42	29.50	26.50
Troop D	8.08	7.33	8.00	8.42
Troop E	12.08	12.00	11.25	12.58
Troop F	13.33	14.25	11.75	12.67
Troop H	3.00	3.00	2.08	2.00
Troop I	3.00	3.00	3.00	3.92
Troop K	16.00	14.58	14.92	15.00
Troop L	12.50	10.50	9.83	8.50
Total Active RSTs	120.3	114.2	112.8	110.5
Patrol Troopers Only				
Troop A	43.50	38.67	41.58	47.00
Troop B	33.58	34.50	32.17	29.75
Troop C	29.25	32.92	32.50	38.25
Troop D	44.92	44.42	41.58	40.33
Troop E	46.92	42.50	40.92	37.50
Troop F	41.75	39.00	37.50	32.25
Troop G	53.33	58.33	58.25	59.50
Troop H	52.00	53.25	51.92	55.83
Troop I	38.50	37.67	34.42	30.58
Troop K	37.83	39.83	36.92	36.58
Troop L	34.58	35.25	38.00	40.08
Total Active Patrol Troopers	456.17	456.33	445.75	447.67
RSTs and Patrol Troopers				
Troop A	59	54	58	62
Troop B	40	40	38	36
Troop C	59	61	62	65
Troop D	53	52	50	49
Troop E	59	54	52	50
Troop F	55	53	49	45
Troop G	53	58	58	59
Troop H	55	56	54	58
Troop I	42	41	37	34
Troop K	54	54	52	52
Troop L	47	46	48	48
Total	576	569	558	558
Avg per Troop	52	52	51	51
Source: CORE-CT.				

Trends in active status based on leave. As noted earlier, sworn personnel may not be active in an assigned patrol position due to leave or light duty status. An analysis was conducted to determine whether leave and light duty occurred at relatively similar rates overall and at the individual Troop level from FY 09 to FY 12. One complicating factor is that CSP began more fully tracking light duty in CORE-CT beginning in April 2011. Time periods prior to April 2011 will not have complete information on this status, with any increases in light duty in FY 12 potentially an artifact of these recordkeeping changes. However, CSP human resources personnel consider leaves and workers' compensation information accurate in prior years. Thus, the following analysis excludes light duty assignments, and focuses on leave and workers' compensation statistics.

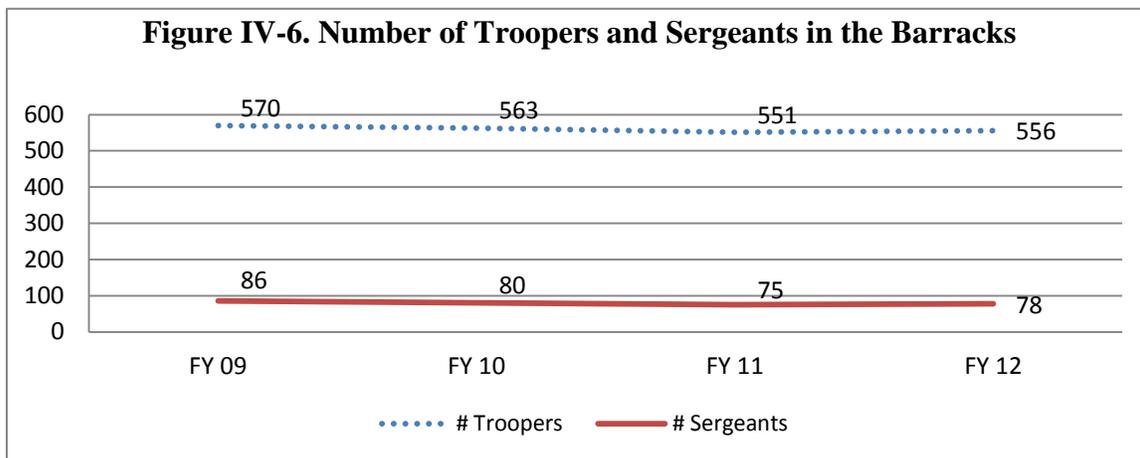
Table IV-4 shows the average number of patrol and resident state troopers unavailable for active duty due to leave, including leave due to workers' compensation for FYs 09-12. There has been an overall 38 percent increase in the average number of patrol and resident state troopers on leave, with the sharpest increase occurring in FY 12.

Table IV-4. Average Number of Patrol and Resident State Troopers on Leave: FY 09–FY 12					
	FY 09	FY 10	FY 11	FY 12	Change from FY 09 to FY 12
Troop F	1.3333	1.7500	2.9167	7.6667	+475%
Troop E	2.9167	3.9167	3.0833	6.7500	+131%
Troop D	2.3333	2.0833	4.0833	4.1667	+78%
Troop A	3.1667	3.1667	3.4167	5.2500	+66%
Troop K	2.2500	3.9167	2.9167	2.9167	+30%
Troop G	4.0833	3.4167	2.0000	5.2500	+28%
Troop B	1.8333	1.1667	1.7500	2.3333	+27%
Troop C	3.5833	4.5000	4.2500	4.3333	+21%
Troop L	3.3333	1.9167	1.0833	3.7500	+12%
Troop I	5.1667	3.5833	3.0833	4.3333	-16%
Troop H	6.5000	5.0000	2.2500	3.4167	-47%
Total on Leave	36.5	34.4	30.8	50.2	
Total # Troopers	564	555	544	539	
Avg on Leave per Troop	3.3	3.1	2.8	4.6	+39%
Source: CORE-CT.					

One of the reasons for the increase in troopers on leave is the increase in the number away on military leave as the overall number of patrol and resident state troopers is decreasing (Figure IV-5).



Number of sergeants. The monthly average number of sergeants assigned to a barracks supervising the patrol and resident state troopers is shown in Figure IV-6 for FYs 09-12. Note there were five sergeants under contract with municipalities to supervise constables, and they were excluded from the count of the number of sergeants available to supervise resident state troopers or patrol troopers.



While the number of troopers in the Barracks (patrol troopers and resident state troopers combined) decreased slightly by 2 percent, from 570 to 556, the number of sergeants in the Barracks decreased at more than four times that rate, by approximately 9 percent, from 86 to 78.

Number of sworn personnel in specialized units. Table IV-5 shows the average number of sworn staff in specialized units for FY 09 through FY 12. These specialized units are often where sworn personnel assigned elsewhere are placed when they are on light duty, as these units are not considered patrol-focused. Therefore, these figures include both the average number of sworn active and permanently assigned personnel, and the sworn personnel who are on light duty (and presumably assigned somewhere else when not on light duty). Light duty sworn personnel are included because they may perform the same tasks as non-light duty sworn personnel within the specialized units.

There was a 23 percent decrease from FY 09 to FY 12 in total number of staff in these specialized units. Overall, the Bureau of Criminal Investigation (BCI) experienced a 43 percent decrease in staffing from FY 09 to FY 12, the largest of all the specialized units. The staffing levels for particular units within BCI provide detail on where reductions occurred.

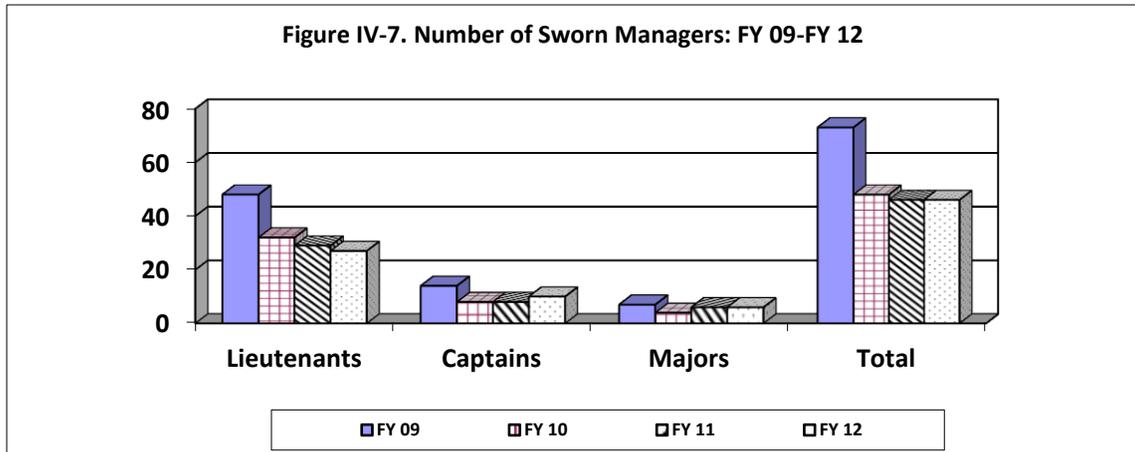
Table IV-5. Average Number of Active Sworn Staff (including light duty) in Particular Units					
Unit	FY 09	FY 10	FY 11	FY 12	Percent Change from FY 09 to FY 12
BCI Total	82.0	53.6	59.7	46.7	-43.0%
BCI-Auto Theft	13.6	8.7	6.7	2.9	
BCI-SOCITF	6.9	5.8	5.4	4.6	
BCI-SUVCCTF	9.1	2.8	2.2	2.3	
BCI-Firearms Task Force	8.5	4.4	3.4	2.3	
BCI-Narcotics	30.9	23.6	26.2	21.8	
BCI-Fugitive Task Force	2.9	3.0	0	0.5	
BCI-Central Criminal Intelligence Unit	3.7	1.1	2.9	1.3	
BCI-Other	6.4	4.2	12.9	11.0	
Emergency Services Unit	19.1	17.4	19.7	24.4	+27.7%
Computer Crimes	11.7	12.9	11.6	10.9	-6.8%
Major Crimes Squads	88.1	92.4	86.1	80.7	-8.4%
Office of Counter Terrorism	11.7	11.7	11.2	9.6	-17.9%
Casino Unit	34.6	30.5	32.7	31.3	-9.5%
Traffic Services Unit	50.6	40.7	38.0	31.8	-37.2%
Other ¹	193.6	159.6	168.0	144.7	-25.2%
Total of Non-Troop Sworn Personnel	491.4	418.8	427.0	380.1	-22.6%

¹Includes Troop W, a federally funded airport security troop.
Source: Source: CORE-CT time and attendance data.

Sworn personnel by rank. CSP defines sworn managers as those serving in the following five ranks:

- Colonels
- Lieutenant Colonels
- Lieutenants
- Captains
- Majors

The actual number of sworn personnel in managerial positions declined by 37 percent from FY 09 to FY 12 (Figure IV-7), with the greatest decrease occurring from FY 09 to FY 10. Especially impacted were lieutenants (33 percent decrease from FY 09 to FY 10), and captains and majors (43 percent decrease).



The remaining six ranks are considered non-management:

- Master Sergeant
- Sergeant
- Police Officer
- Trooper First Class
- Trooper
- Trooper Trainee

Table IV-6 shows the average number of active sworn personnel in each of the non-management ranks for FY 09 to FY 12. The number of sworn personnel in non-management positions declined by 13 percent, with the greatest decreases occurring in the ranks of trooper first class (20 percent decrease) and sergeant (18 percent decrease).

Rank	FY 09	FY 10	FY 11	FY 12
Trooper Trainee	27	20	29	0
Trooper	206	244	264	266
Trooper First Class	672	600	574	534
Police Officer	4	4	3	2
Sergeant	190	165	163	156
Master Sergeant	14	12	13	12
Total	1,113	1,045	1,046	970

¹Excludes personnel on leave or light duty
Source: CORE-CT time and attendance data.

Ratio of active sworn managers to non-managers. Table IV-7 compares the number of sworn personnel who are in management positions. Except for FY 09, fewer than five percent of sworn personnel have been in management positions. Stated another way, over 95 percent of sworn personnel have been in non-management positions.

# of Sworn:	FY 09	FY 10	FY 11	FY 12
Managers	73	48	46	46
Non-Managers	1,113	1,045	1,046	970
Total	1186	1093	1092	1016
Percent Managers of Total	6.6%	4.6%	4.4%	4.7%
Source: CORE-CT time and attendance data.				

Number of non-active sworn personnel. Table IV-8 shows the average number of non-active sworn personnel on leave or light duty by rank, combining all sworn managers. Next to each average number of non-active personnel by rank is the percentage that number represents out of the total average number of personnel at that rank. For example, in FY 09, an average of 11 troopers was on leave or light duty, which was five percent of the total average number of active troopers for that same year. The overall percent of sworn personnel on leave or light duty has risen from four percent in FY 09 to six percent in FY 12.

Rank	FY 09		FY 10		FY 11		FY 12	
	#	%	#	%	#	%	#	%
Trooper Trainees	0	0%	0.4	0%	0	0%	NA	NA
Troopers	11	5%	10.8	4%	15.2	6%	20.8	8%
Troopers First Class	34.7	5%	31.2	5%	27.8	5%	38.2	7%
Sergeants	3.6	2%	6.4	4%	7.2	4%	5.7	4%
Master Sergeants	0	0%	0.4	3%	1.2	9%	0.6	5%
Sworn Managers	0.3	0%	1.6	3%	1.1	2%	0	0%
Total	49.6	4%	50.8	5%	52.5	5%	65.3	6%
Source: CORE-CT time and attendance data.								

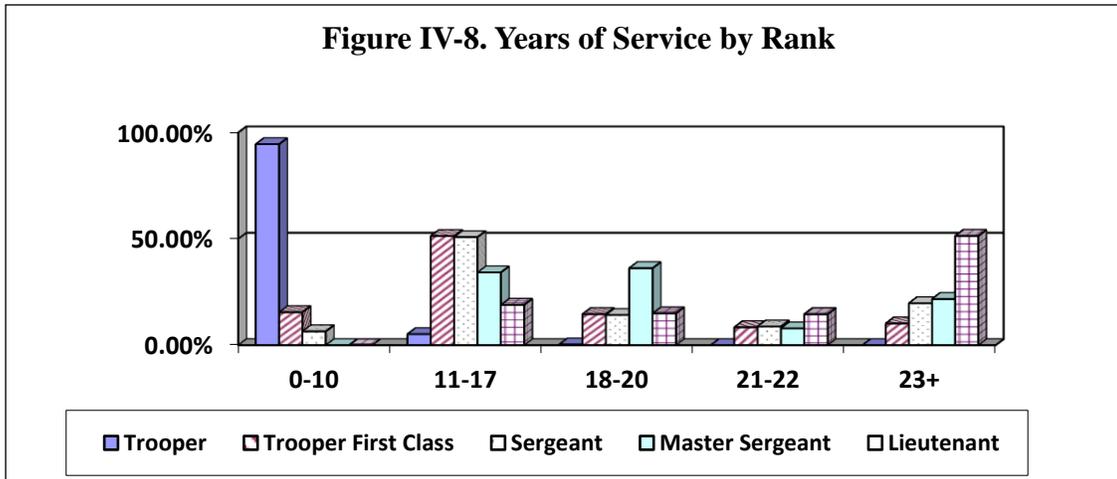
Sworn Personnel Balance Between Different Units

Table IV-9 shows the average number of active sworn personnel in each of the CSP units under review. Despite the overall decrease in active sworn personnel, the percentages remain fairly consistent. Troop operations account for slightly more than half of all sworn personnel (52-55 percent), the resident state trooper program approximately 10-11 percent, major crimes 7-8 percent, the casino unit 3 percent, and traffic services 3-4 percent. The Bureau of Criminal Investigations appears to have decreased from an average of 81 active sworn personnel (7 percent in FY 09) to an average of 45 personnel (4 percent in FY 12).

Table IV-9. Location of Active Sworn Personnel: FY 09-FY 12¹				
# Assigned to:	FY 09	FY 10	FY 11	FY 12
Operations Patrol Troopers ²	621	602	598	560
Resident State Troopers	120	114	113	110
Major Crimes	88	91	86	81
Traffic Services Unit	50	41	38	32
Casino Unit	35	30	33	31
Bureau Criminal Invest	81	53	58	46
Emergency Svcs Unit	19	17	19	24
Other	172	144	147	133
Total	1,186	1,092	1,092	1,017
¹ Excludes personnel on leave or light duty				
² Includes Troop W				
Source: CORE-CT time and attendance data.				

Years of Service. Taking into consideration all sworn personnel, including those on leave or light duty, there are different average numbers of years of service for each of the ranks (Table IV-10). Figure IV-8 shows categories of years of service by rank for FY 12.

Table IV-10. Average Number of Years of Service in each Rank: FY 09-FY 12¹				
Rank	FY 09	FY 10	FY 11	FY 12
Trooper Trainee	1.0	1.00	1.0	NA
Trooper	3.8	3.9	4.6	4.6
Trooper First Class	14.9	14.6	15.5	15.6
Sergeant	17.6	17.0	17.5	17.5
Master Sergeant	20.2	19.9	20.4	19.8
Lieutenants	21.59	21.6	22.9	22.5
Captains	29.31	28.3	25.0	24.1
Majors	22.7	23.3	26.1	26.4
¹ Includes sworn personnel on leave or light duty				
Source: CORE-CT time and attendance data.				



Service separations by rank and average years of service. Table IV-11 shows the service separations that occurred during FY 09 through FY 12 and length of service at time of retirement. Because Troopers are often promoted to Trooper First Class after approximately seven years of service, very few leave while still in the Trooper rank.

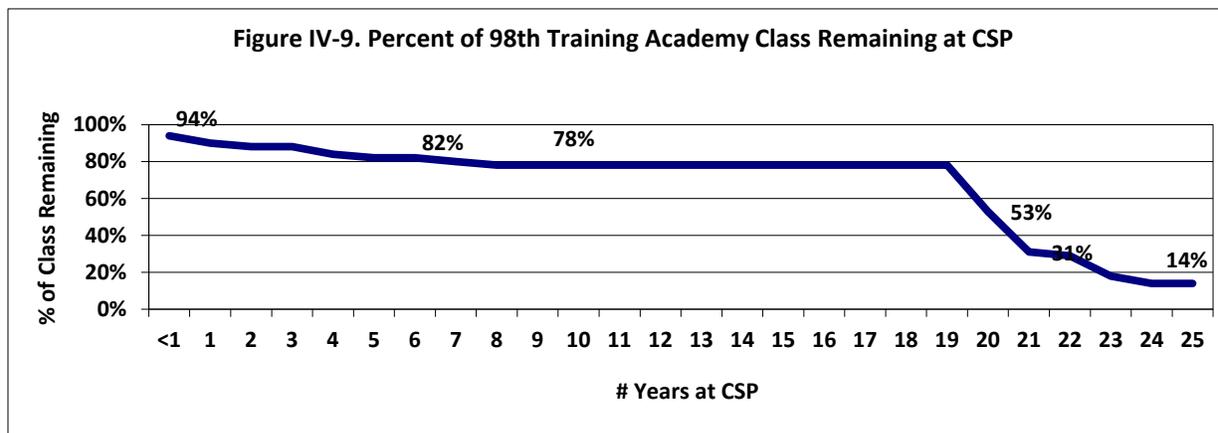
Rank	LE 10 Yrs	11-17 Yrs	18-20 Yrs	21-22 Yrs	23+ Yrs	Total
Trooper Trainee	2					2
Trooper	57	0	1	1	0	59
Trooper First Class	4	13	23	47	82	169
Sergeant	1	1	5	18	30	55
Master Sergeant	0	0	0	2	4	6
Lieutenants	0	0	3	5	14	22
Captains	0	0	0	0	7	7
Majors	0	0	0	0	3	3
Lt Col	0	0	0	2	4	6
Total	64 (19%)	14 (4%)	32 (10%)	75 (23%)	144 (44%)	329

¹Excludes 3 Law Enforcement Instructors, 2 Police Officers, and 32 Trooper Trainees (6 months) (i.e., did not complete academy)
Source: CORE-CT time and attendance data.

Table IV-12 shows there were large fluctuations in the number of sworn personnel leaving CSP in each of the four fiscal years, and identifies the reasons why sworn personnel left CSP.

Table IV-12. Reasons Why Sworn Personnel Left CSP				
Reason for Leaving CSP	FY 09	FY 10	FY 11	FY 12
Hazardous Duty Retirement	9	17	47	54
Retirement Incentive Program	122	1	0	0
Layoff Due to Lack of Work	0	0	0	56 ¹
Other	6	2	5	8
Total	137	20	53	118
¹ Rehired shortly after layoff. Source: CORE-CT.				

Projecting the time at which an officer will terminate service with CSP is somewhat challenging and may be impacted by the economy, retirement incentive programs, etc. PRI staff was able to obtain detailed length of service information for the graduates of the 98th CSP Training Academy class. Note that 67 cadets entered the training academy in April 1988, and 49 cadets graduated in September 1988, representing a 73 percent completion rate. Figure IV-9 shows the length of service for the 49 officers who completed the 98th training academy class approximately 25 years ago.



After losing almost one quarter of the graduates within in the first eight years, there are no additional losses until the 20 year anniversary is reached.⁴⁷ At that point, there is a sharp decline in the percent of the class remaining, with 25 percent leaving on their 20th year of service, and an additional 22 percent leaving after their 21st year of service. Currently, the seven officers remaining at CSP account for approximately 14 percent of the original graduating class.

⁴⁷ Eligibility for hazardous duty retirement was recently changed to requiring a minimum of 25 years instead of 20 years.

Overtime

Both sworn and non-sworn personnel may work overtime hours. While the focus of this study is on sworn personnel, overtime worked by dispatch operators will also be examined at the end of this section.

Overtime for Sworn Personnel. Non-management sworn personnel are eligible to work overtime. There are two types of overtime: regular duty overtime and special duty overtime.

1. *Regular duty overtime* is used to cover patrol shifts when troopers are sick, on vacation, etc. Regular duty overtime earnings are included in pension calculations.
2. *Special duty overtime* is considered voluntary overtime, and primarily consists of highway construction projects, and occasionally other project assignments such as town fairs, etc. Overtime for highway construction projects is not considered part of earnings for retirement purposes, whereas overtime earnings for other special duty project assignments are included in such calculations.

Figure IV-10 shows the number of overtime hours worked by non-management sworn personnel during FY 09 to FY 12. Regular duty overtime decreased 54 percent from FY 09 to FY 12, most of the decrease occurring in FY 11. Special duty overtime also saw a decrease of 34 percent from FY 09 to FY 12.

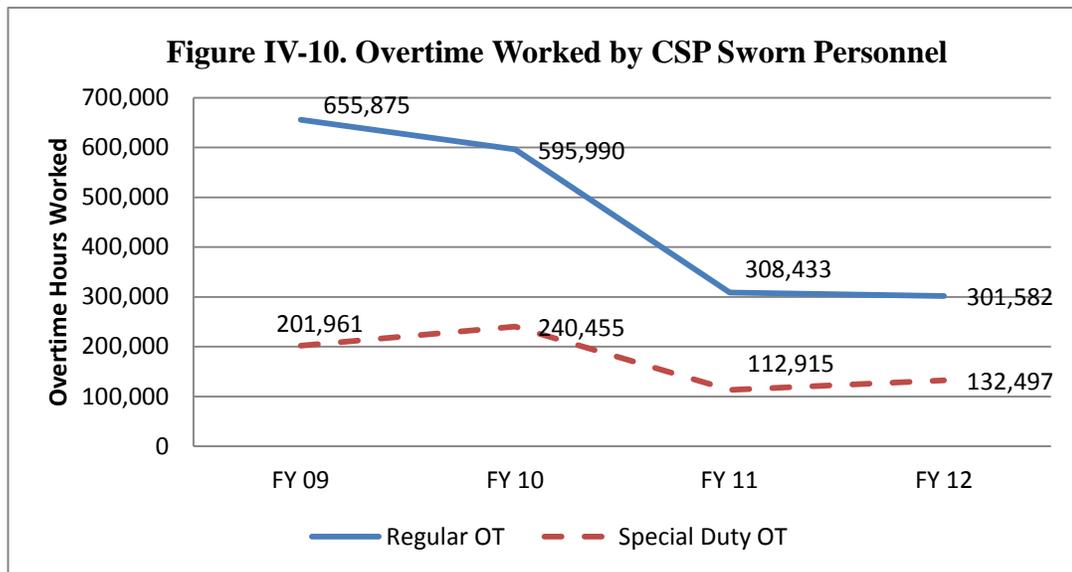
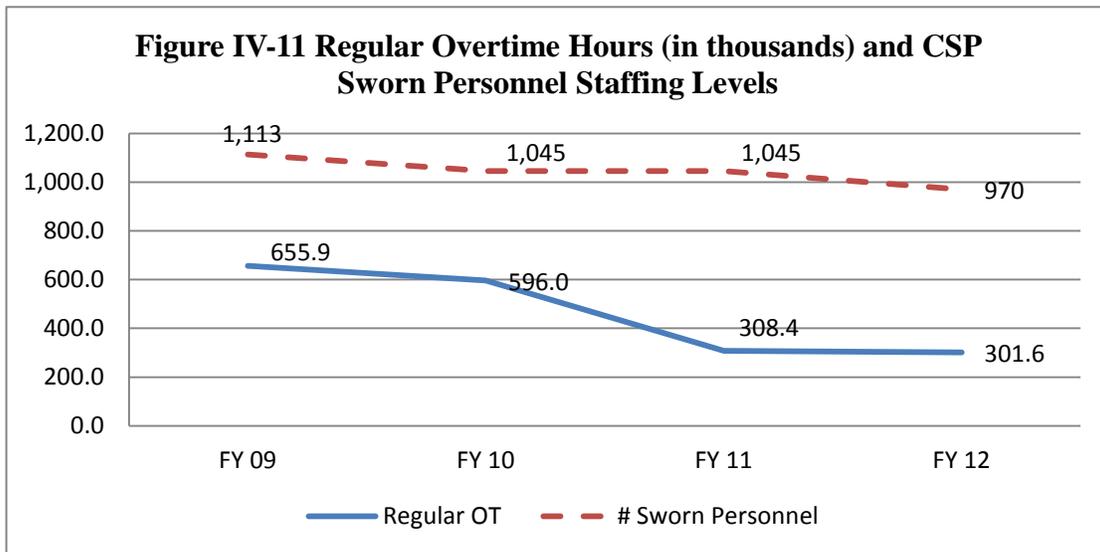
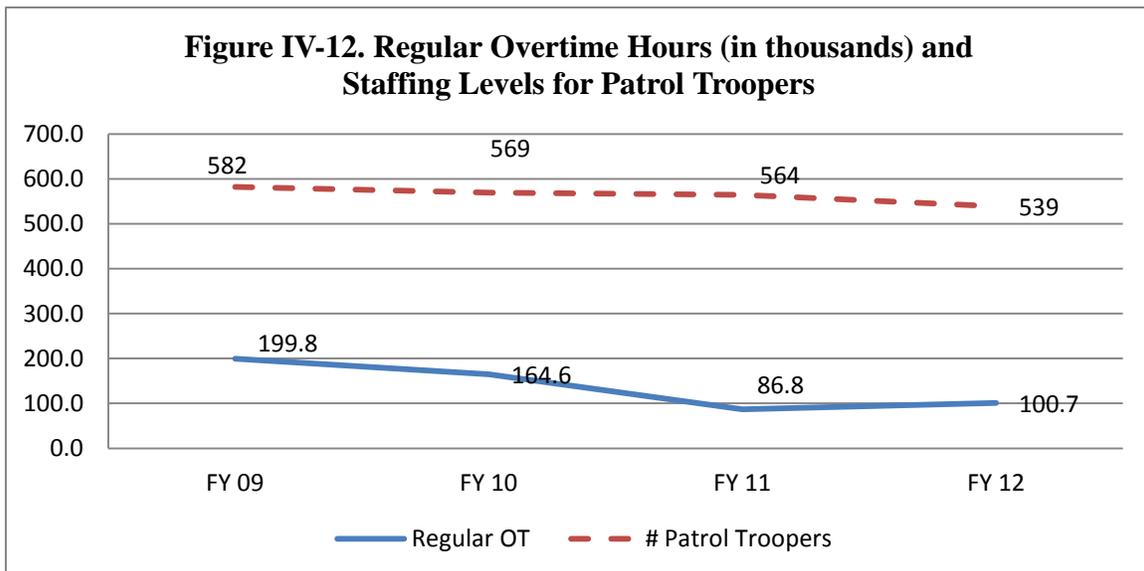


Figure IV-11 shows the relationship between non-management staffing levels and overtime hours (in thousands) for all active (non-light duty) sworn personnel. Although the number of active sworn personnel remained constant at 1,045 in FYs 10 and 11, the amount of regular duty overtime was reduced by 288,557 hours (48 percent). CSP personnel interviewed by PRI staff attributed the decrease to a policy decision made to sharply limit overtime.



Patrol shifts must be covered 24/7. If a trooper is absent for whatever reason, the shift still has to be covered. Figure IV-12 shows the number of regular duty overtime hours for active patrol troopers during FY 09 to FY 12. Although regular duty overtime for patrol troopers declined 57 percent during FY 09 to FY 11, there was a subsequent 16 percent increase in overtime from FY 11 to FY 12. This increase in regular duty overtime for patrol troopers also occurred at the same time there was a loss of 25 active patrol troopers, the biggest staffing level decrease during the four year period.



Overtime by Rank

Table IV-13 shows the number of hours of regular duty overtime worked by rank for FY09 to FY 12. Trooper First Class personnel had the highest number of regular duty overtime, and saw a 36 percent reduction in hours from FY 10 to FY 11.

Table IV.-13 Total Regular Duty Overtime Hours by Rank				
Rank	FY 09	FY 10	FY 11	FY 12
Trooper Trainee	6,123	3,876	2,229	
Trooper	75,553	77,993	49,637	58,949
Trooper First Class	422,624	369,928	183,319	174,678
Sergeant	138,467	130,729	65,649	61,266
Master Sergeant	9,520	10,025	6,323	5,738
Source: CORE-CT.				

Average Amount of Overtime Per Officer

Taking into consideration the number of officers within each rank, Table IV-14 shows the average number of regular duty overtime hours per officer within each of the non-management ranks. Consistent with the overtime reduction in regular duty overtime hours shown in Table IV-13, the annual number of overtime hours decreased in FY 10 and FY 11 from 617 hours to 319 hours per Trooper First Class officer.

Table IV-14. Average Regular Duty Overtime Hours Per Officer				
Rank	FY 09	FY 10	FY 11	FY 12
Trooper Trainee	227	194	77	NA
Trooper	367	320	188	222
Trooper First Class	629	617	319	327
Sergeant	729	792	403	393
Master Sergeant	680	835	486	478
Source: CORE-CT.				

Overtime per Troop

Excluding Resident State Troop overtime—which is paid for by the towns—Table IV-15 shows the number of hours of regular duty overtime worked in each of the Troops. All Troops saw a decrease in overtime from FY 09 to FY 12, with the greatest change occurring from FY 10 to FY 11. Troop A and Troop G both had 63 percent drops in overtime, the largest changes from FY 09 to FY 12. Troop F, on the other hand, had a smaller decrease in overtime (26 percent).

Table IV-15. Regular Duty Overtime Per Troop					
Troop	FY 09	FY 10	FY 11	FY 12	Pct Change from FY 09 to FY 12
Troop A	26,095	26,980	11,061	9,776	-63%
Troop B	15,934	14,669	8,345	10,226	-36%
Troop C	23,033	19,187	10,349	10,643	-54%
Troop D	24,467	19,762	12,125	13,593	-44%
Troop E	26,796	25,120	14,244	18,891	-30%
Troop F	19,610	16,520	11,675	14,517	-26%
Troop G	70,194	56,217	25,756	26,044	-63%
Troop H	31,006	26,495	14,790	20,003	-35%
Troop I	21,877	19,381	10,868	13,106	-40%
Troop K	29,460	25,593	12,254	12,594	-57%
Troop L	20,021	23,758	12,846	10,384	-48%
Total	308,492	273,681	144,310	159,776	-48%

Source. CORE-CT.

Table IV-16 shows the regular duty overtime worked by patrol troopers only.

Table IV-16. Regular Duty Overtime Per Troop for Patrol Troopers				
Troop	FY 09	FY 10	FY 11	FY 12
Troop A	18,276	20,585	8,223	6,721
Troop B	8,473	7,454	4,692	6,278
Troop C	14,851	11,139	6,054	6,157
Troop D	16,455	10,828	8,236	9,127
Troop E	15,711	14,656	8,043	12,020
Troop F	12,464	9,031	7,324	9,797
Troop G	43,976	34,094	13,747	15,716
Troop H	22,916	16,561	9,654	13,387
Troop I	14,268	11,501	6,784	9,383
Troop K	18,966	14,340	7,558	7,563
Troop L	13,465	14,387	6,256	4,540
Total	199,819	164,573	86,570	100,686

Source: CORE-CT.

To put this amount of overtime into context, the average number of hours a patrol trooper was available to work in FY 12 was 1,685 hours (see shift relief factor chapter). Dividing the number of overtime hours by 1,685, Table IV-17 shows the number of additional patrol troopers needed in order to avoid any overtime. Of course, illnesses and other reasons for patrol trooper absence cannot be readily predicted; however, Table IV-17 provides a sense of possible patrol trooper shortage if all regular duty overtime was necessary.

Table IV-17. Number of Additional Patrol Troopers Needed to Avoid Any Overtime				
Troop	FY 09	FY 10	FY 11	FY 12
Troop A	10.8	12.2	4.9	4.0
Troop B	5.0	4.4	2.8	3.7
Troop C	8.8	6.6	3.6	3.7
Troop D	9.8	6.4	4.9	5.4
Troop E	9.3	8.7	4.8	7.1
Troop F	7.4	5.4	4.3	5.8
Troop G	26.1	20.2	8.2	9.3
Troop H	13.6	9.8	5.7	7.9
Troop I	8.5	6.8	4.0	5.6
Troop K	11.3	8.5	4.5	4.5
Troop L	8.0	8.5	3.7	2.7
Total	118.6	97.7	51.4	59.8

Source: CORE-CT.

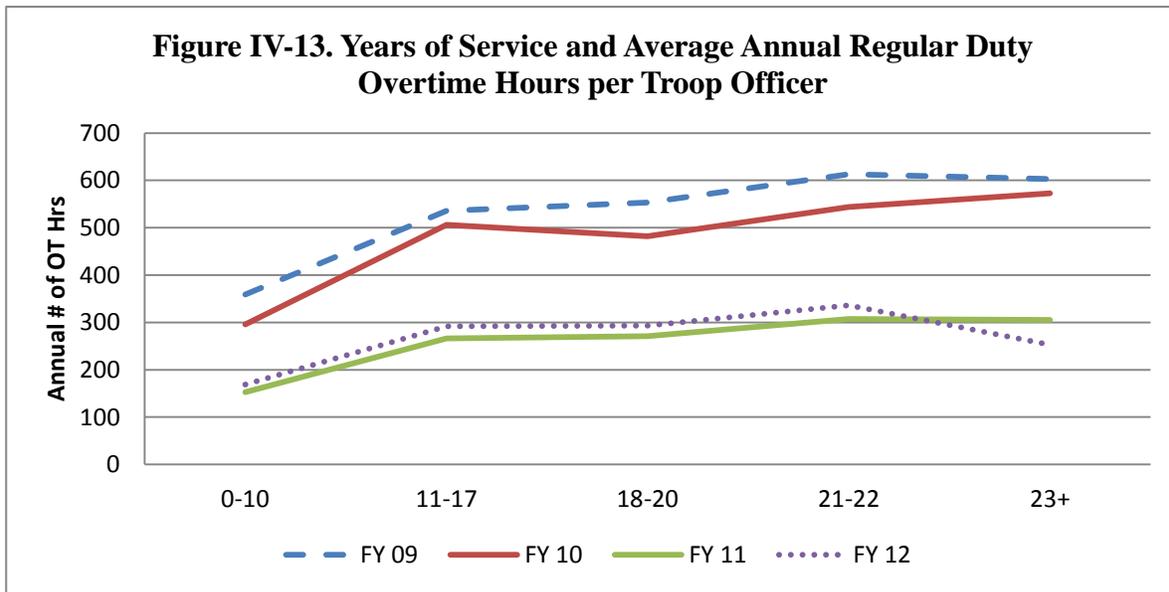
Overtime by Years of Service

In interviews with CSP personnel, PRI staff was told of increases in overtime for officers nearing retirement, as a way to maximize pension payments. Table IV-18 shows the categories of years of service and the average number of hours of regular duty overtime for sworn personnel in the Troops (excludes Resident State Trooper program).

Table IV-18. Years of Service and Average Regular Duty Overtime Hours Per Officer				
Years of Service	FY 09	FY 10	FY 11	FY 12
0-10	359	296	153	169
11-17	536	506	266	292
18-20	553	482	271	293
21-22	613	544	307	336
23+	603	573	305	253
Total	447	393	211	232

Source: CORE-CT.

Figure IV-13 pictorially shows the increase in regular duty overtime hours toward the end of the officer's CSP career for all four fiscal years analyzed.

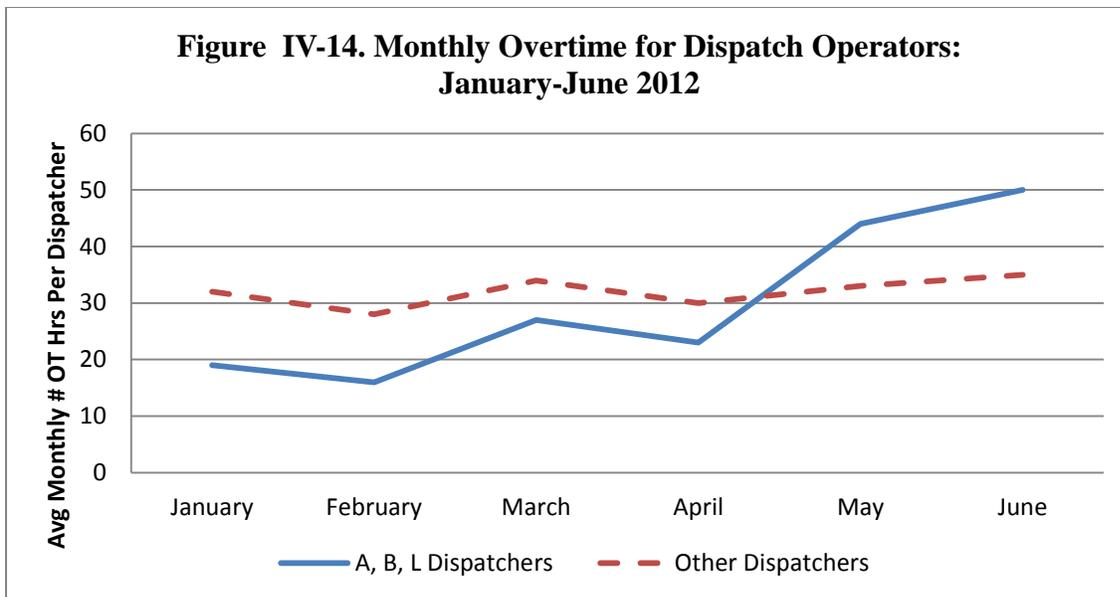


Dispatch Operator Overtime

With the recent consolidation of dispatch operations in Troops A, B and L, there was some question as to whether it resulted in an increase in overtime for dispatch operators. Table IV-19 shows overtime for dispatch operators during January to June 2012, the time before, during and after which dispatch was consolidated (sometime in March 2012).

The average number of overtime hours per dispatcher more than doubled in the consolidated dispatch. In contrast, dispatch operators outside of the consolidated area saw a fairly steady amount of overtime (Figure IV-14). Overtime for dispatchers in FY 13 may show a different pattern—nevertheless, this increase may be instructive as CSP continues to consolidate dispatch centers.

Table IV-19. Monthly Overtime for Dispatch Operators: January-June 2012						
	Jan	Feb	Mar	Apr	May	Jun
Troops A, B, L						
Hrs OT	288	244	398	344	622	704
# Dispatchers	15	15	15	15	14	14
Avg # OT hrs per dispatcher	19	16	27	23	44	50
All Other Dispatchers						
Hrs OT	2,144	1,888	2,052	2,072	2,220	2,208
# Dispatchers	68	67	61	68	67	64
Avg # OT hrs per dispatcher	32	28	34	30	33	35
Source: CORE-CT.						



Summary

Unlike the minimum staffing level requirements for each Troop’s minimum number of patrols by shift, and contractual requirements for the number of resident state troopers, there are no minimum staffing requirements for other areas within CSP. The 1997 CSP PAM study referenced earlier in the report assumed an 85% to 100% staffing level for all non-patrol positions within CSP. Clearly, such an application has not been applied in recent years.

While it appears that, at least historically, considerable attention was given to the number of patrols within each of the Troops, no similar attention was given to setting staffing levels outside the Troops. Moreover, CSP has told PRI staff that ensuring the daily minimum number of patrols is staffed is the division’s first priority.

Consequently, the large decreases seen in many of the specialized units can only be assessed in terms of what, if any, impact these staffing reductions have had on overall performance? Given the current study focus on public and trooper safety related measures, the question can be asked as to whether there has been a deleterious impact on response time, crime clearance rates, safety from crimes and highway accidents, citizen satisfaction with service, and trooper safety as staffing levels in the specialized units—and Troop operations as a whole--have declined?

The amount of regular duty overtime that is necessary should be a factor in assessing whether CSP has a sufficient number of personnel. The overtime levels for sworn personnel decreased from FY 09 to FY 11; however, figures appeared to be trending upward in FY 12. Given the time and a half hourly rate for overtime, sustained increases in overtime hours should be weighed against the costs to hire additional staff. Staffing level changes in both patrol and non-patrol CSP functions and the potential impact on public and trooper safety related measures is the focus of the remainder of this report.

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Response Time

Theory being tested:

As staffing levels **decreased**, response time **increased**

Findings:

- Response time is viewed as the amount of time in minutes between when a 9-1-1 call for service is received by dispatch and the first officer arrives on the scene
- As staffing levels decreased, median response time for 9-1-1 calls overall increased by 1 minute, from 9 minutes in FY 09, to 10 minutes in FYs 10-12
- Despite increased response time, a 1997 CSP goal of at least 50% of calls responded to within 15 minutes was still met
 - The decline in the number of 9-1-1 calls may have played a role in maintaining the 15 minute average
- Some police departments set more stringent response times for the most serious types of calls for service, something Connecticut may want to consider for domestic violence and assaults
 - 14% of domestic violence calls in the two Troops handling the highest volume of such calls, took more than 30 minutes to respond to in FY 12—double the 15 minute average goal used in 1997

Conclusion:

Analyses supported the theory that decreased staffing levels were associated with increased response times; however current performance still meets a 1997 goal of at least 50% of calls responded to within 15 minutes

The Office of Statewide Emergency Telecommunications (OSET) maintains statistics on the number of 9-1-1 calls received by CSP Public Safety Answering Points (PSAPS) located in Troops A, B, E, G, H, I, L and W. In addition to the number of seconds needed for the dispatch operator to answer the 9-1-1 call, response time is also viewed as the amount of time in minutes between when a call for service is received by dispatch and the first officer arrives on the scene.⁴⁸ From the citizen's perspective, this is the time it takes for an officer to arrive in response to his/her 9-1-1 call. The response time for both of these aspects of 9-1-1 calls are analyzed in this chapter.

⁴⁸ Source: Municipal Research and Services Center of Washington website/Police LOS Standards.

Time needed for CSP dispatch centers to answer 9-1-1 calls. The Office of Statewide Emergency Telecommunications (OSET) maintains statistics on the number of 9-1-1 calls received by CSP Public Safety Answering Points (PSAPs) located in Troops A, B, E, G, H, I, L and W. As described in the Background chapter of this report, in March 2012 the dispatch for Troops A, B and L was merged into a single PSAP located at Troop L. Calls for the other Troops are received and dispatched from other PSAPs.

Although dispatch operators are civilians, from the public’s perspective, this is the initial contact with CSP. Further, sworn personnel answer 9-1-1 calls and otherwise assist civilian dispatchers in handling the police aspects of 9-1-1 calls.

This section examines emergency call response time in terms of how long it took the CSP dispatch centers to answer 9-1-1 calls. Quarterly information from OSET for the period of July 2008 to June 2012 (FY 09-FY 12) was analyzed including number of 9-1-1 calls:

- received;
- answered within 10 seconds (national standard);
- answered and not transferred; and
- abandoned (by caller after more than 10 seconds).

Number of 9-1-1 calls received by CSP PSAPs. Table V-1 shows the number of 9-1-1 calls received by the CSP PSAP. Note the 9-1-1 call decreases in FY 12 for Troop A and Troop B are due to the merged dispatch with Troop L, which saw an increase during the year. Overall, 9-1-1 calls received by the CSP PSAPs increased by seven percent from FY 09 to FY 12.

Table V-1. Number of 9-1-1 Calls Received by the CSP PSAP				
Troop	FY 09	FY 10	FY 11	FY 12
Troop A	58,974	60,873	66,095	58,766
Troop B	5,307	4,768	5,150	4,231
Troop E	36,466	39,781	40,478	38,804
Troop G	205,016	208,595	212,022	222,251
Troop H	150,392	126,722	135,075	144,453
Troop I	90,423	89,652	98,582	104,338
Troop L	7,557	7,414	7,809	21,228
Troop W	2,198	1,935	2,298	2,353
Total	556,333	539,740	567,509	596,424

Source: Office of Statewide Emergency Telecommunications (OSET)

Percent of 9-1-1 calls answered within 10 seconds by CSP PSAPs. Table V-2 shows the percent of 9-1-1 calls that were answered by dispatch within 10 seconds of the call ringing. Connecticut has adopted the national standard of answering 90 percent of all 9-1-1 calls within 10 seconds.⁴⁹ Table V-2 shows there were just two times during this four year period where the percent answered within 10 seconds fell below 90 percent, both of which occurred for Troop H,

⁴⁹ National Emergency Number Association (NINA), U.S. Department of Justice, Bureau of Justice Statistics, September 1980.

the PSAP with the second highest call volume. Overall, the CSP PSAPs continue to answer 9-1-1 calls in a timely fashion despite the seven percent increase in calls.

Table V-2. Percent of 9-1-1 Calls Answered Within 10 Seconds by the CSP PSAP				
Troop	FY 09	FY 10	FY 11	FY 12
Troop A	94.0%	94.9%	95.2%	94.0%
Troop B	97.1%	97.6%	98.2%	97.8%
Troop E	98.0%	97.8%	98.2%	98.2%
Troop G	91.3%	91.3%	92.0%	93.3%
Troop H	83.9%	98.8%	89.7%	90.8%
Troop I	90.6%	93.4%	93.7%	96.2%
Troop L	98.4%	97.9%	97.8%	96.9%
Troop W	98.5%	99.2%	98.9%	98.8%
Total	94.0%	96.4%	95.5%	95.7%

Source: Office of Statewide Emergency Telecommunications (OSET)

Percent of calls answered and not transferred by CSP PSAPs. The PSAP can either respond to the 9-1-1 call directly, or answer the call and transfer it to a municipal police department. Table V-3 shows the percent of calls that could be addressed by the CSP PSAP and were not transferred to a local police department. Approximately two-thirds of 9-1-1 calls received by the CSP PSAP were responded to directly by CSP, and one-third were transferred to a local police department. There are approximately 106 PSAPs, with most municipalities with their own police departments also having their own PSAPs.

Table V-3. Percent of Calls Answered and Not Transferred by the CSP PSAP				
Troop	FY 09	FY 10	FY 11	FY 12
Troop A	53.2%	53.1%	52.3%	53.0%
Troop B	69.3%	71.5%	70.5%	64.8%
Troop E	66.6%	69.3%	69.1%	68.5%
Troop G	57.8%	57.4%	59.0%	59.9%
Troop H	54.2%	52.7%	58.8%	57.9%
Troop I	64.2%	56.3%	59.3%	55.0%
Troop L	81.5%	80.0%	79.3%	62.4%
Troop W	79.1%	81.1%	82.2%	80.7%
Total	65.8%	65.2%	66.3%	62.8%

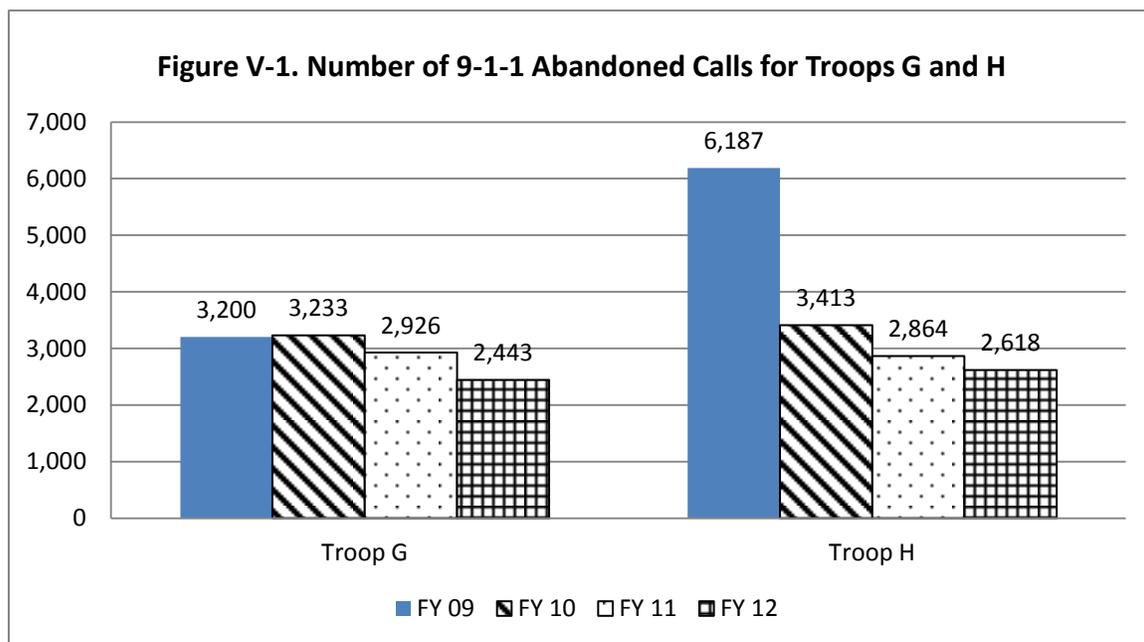
Source: Office of Statewide Emergency Telecommunications (OSET)

Number of abandoned calls to CSP PSAPs. Table V-4 shows the number of abandoned calls—that is, calls where either the caller hung up within 10 seconds of placing the call, or had hung up by the time the dispatch operator got to a call more than 10 seconds after the call began ringing. In FY 09, approximately 2.1 percent of 9-1-1 calls to the CSP PSAPs were considered abandoned calls, compared with 1.2 percent in FY 12.

Table V-4. Number of Abandoned Calls to CSP PSAPs				
Troop	FY 09	FY 10	FY 11	FY 12
Troop A	484	461	569	612
Troop B	23	14	8	38
Troop E	106	119	84	111
Troop G	3,200	3,233	2,926	2,443
Troop H	6,187	3,413	2,864	2,618
Troop I	1,904	1,063	1,176	1,210
Troop L	9	10	23	140
Troop W	8	4	5	10
Total	11,921	8,317	7,655	7,182

Source: Office of Statewide Emergency Telecommunications (OSET)

Figure V-1 shows the improvement in the number of abandoned calls for the two CSP PSAPs with the greatest number of such calls, Troops G and H, both “highway” troops.



Time needed for officer to arrive at the incident. Analyses of response time use the average response time or percent of calls that fall into categories of response time. The Bureau of Justice Statistics⁵⁰, for example, divides response times into such categories as:

- within 5 minutes
- 6-10 minutes
- 11 minutes-1 hour
- within 1 day
- longer than one day

⁵⁰ Criminal Victimization, 2010, Bureau of Justice Statistics, Jennifer Truman, September 15, 2011 NCJ 235508.

Many calls for service are not of an urgent nature. Response time for urgent, emergency calls may be separated from all other calls for service. The advantages of a rapid response to emergency 9-1-1 calls is thought to be a reduction or elimination of the risk of injury or death to victims, reduction in public safety risk, and increase in the probability of apprehending a criminal before leaving the scene of the crime.⁵¹

As noted by the U.S. Department of Justice, providing rapid response times to emergencies (e.g., crimes in progress, accidents with injuries) is a significant challenge when a police department is responsible for a broad geographic area and has a limited number of officers.⁵² This is a challenge faced by CSP overall, and some of the more rural Troops in particular.

Standards for Police Response Time

As pointed out in one police staffing study,⁵³ response time to the highest-priority calls must be as rapid as possible, with highest-priority calls including those which "...pose a danger to the lives of citizens and/or police officers and those which present opportunity to capture and arrest an alleged offender." Several studies reviewed by PRI staff mentioned the lack of clear standards for police response times, although some referenced a generally accepted standard among police to respond to priority (the most serious) calls within five minutes.⁵⁴ One reason for a lack of national response time standards is that the perception of what is acceptable is impacted by public expectations.

In the 1997 PAM Study of CSP, a policy decision was made by CSP to define a 15 minute average response time for each troop. The 15 minute standard was considered reasonable given the large geographic areas to be patrolled, and also is fairly close to the average response time of 13.33 minutes in the PAM model.⁵⁵ The CSP do not currently have a standard response time goal; however, the goal set in 1997 was applied to current information given the absence of a more recent goal.

A standard 15 minute average response time is more stringent than the 16.7 minute average response time goal set by the Virginia State Police for FYs 2011 and 2012.⁵⁶ In their calculations, Virginia State Police only included incidents that were of an emergency priority and handled by a field operations unit (i.e., a Troop in Connecticut).

CSP overall response times. Similar to the methodology used by the Bureau of Justice, PRI staff developed response time categories for the current CSP analyses. The response time categories allow for comparisons with 5 minute and 15 minute goals or standards.

⁵¹ Glendale Police Staffing Study 2010: City of Glendale Arizona.

⁵² Guidelines for Starting and Operating a new Police Department, U.S. Department of Justice, Office of Community Oriented Policing Services (COPS), by Deborah Spence, Barbara Webster, and Edward Connors.

⁵³ Glendale Police Staffing Study 2010: City of Glendale Arizona.

⁵⁴ E.g., Glendale Police Staffing Study 2010: City of Glendale Arizona; Oro Valley Police Department Police Officer Staffing Report, February 7, 2007.

⁵⁵ PAM 1997 Study of Connecticut State Police.

⁵⁶ Virginia Department of State Police Strategic Plan 2012-2012.

The CSP CAD system contains information on each “call for service.” The source of the call as entered into CAD is shown in Table V-5. Analysis of response time is applicable to the 9-1-1 calls, as all officer initiated assistance has a zero response time. Sometimes multiple officers responded to the same incident or call for service, and the CAD system generates an additional line of data for each such occurrence. While some analyses examined the number of officers responding to a particular type of incident (e.g., such as a domestic violence related call, which requires at least two officers), the same incident, regardless of the number of times it was repeated in the CAD system, was counted as a single incident.

Source of Call For Service	Annual Average during FY 09-FY 12	Percent
9-1-1 Calls	236,579	34.3%
Officer Initiated	452,525	65.6%
Walk-In	855	0.1%
Alarm	392	0.1%
Total	690,350	100%

Table V-6 shows the response times for 9-1-1 calls to CSP for FY09-FY12.⁵⁷ Response times were for all Troops, Traffic Services Unit and Headquarters. There was a statistically significant increase in response time from FY 09 to FY 12. However, despite this increase, two-thirds of calls—between 67-68 percent-- were responded to within 15 minutes for all four years, thereby meeting the 15 minute CSP average response time goal used in 1997.

Response Time	FY 09	FY 10	FY 11	FY 12
1-5 minutes	33%	32%	31%	31%
6-10 minutes	21%	22%	22%	22%
11-15 minutes	14%	14%	14%	14%
16-20 minutes	8%	9%	9%	9%
21-25 minutes	5%	5%	5%	5%
26-30 minutes	3%	4%	4%	4%
31-45 minutes	6%	6%	6%	6%
46-60 minutes	3%	3%	3%	3%
1-2 hours	3%	3%	4%	4%
More than 2 hours	3%	3%	3%	3%
Total calls with response time	172,143	171,212	171,187	171,295
Total calls	223,154	220,636	218,575	215,263

Source: CSP CAD Data.

⁵⁷ Officer initiated incidents and administrative tasks included in CAD were excluded from this analysis.

The overall number of 9-1-1 calls for service shows a downward trend, decreasing by 3.5 percent from FY 09 to FY 12 (Figure V-2). This decline in calls for service softens the impact of the 11 percent decrease in CSP sworn officers, and 4 percent decrease in active patrol and resident state troopers, in particular.

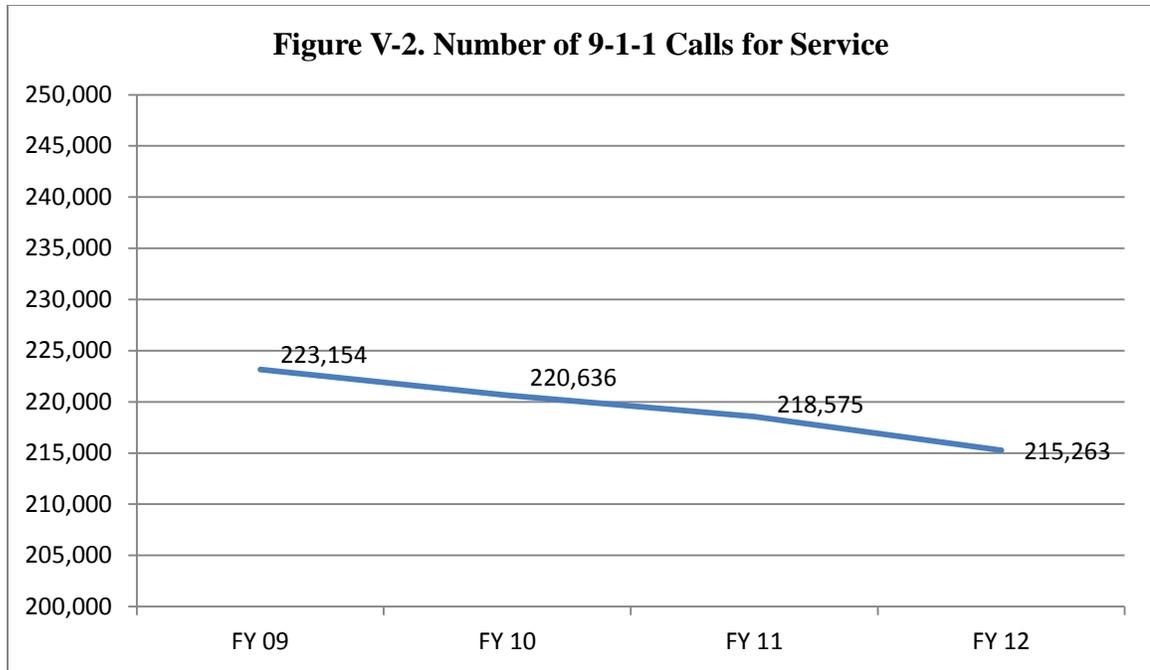
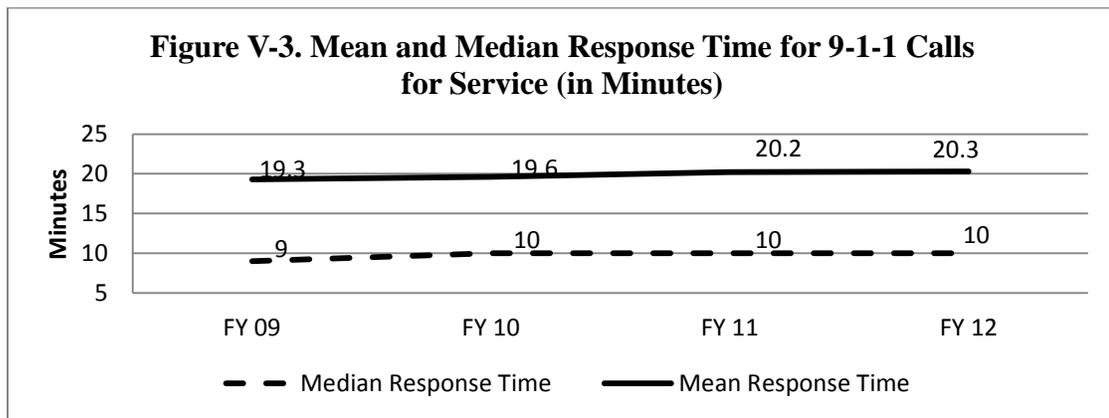


Figure V-3 shows the mean and median⁵⁸ response times for 9-1-1 calls. The overall response rate for these 9-1-1 calls for service shows that, despite the increasing trend in response time, half the calls were responded to within 10 minutes, comfortably above the 15 minute CSP guideline (used in 1997) for half the calls.



⁵⁸ The median is the middle-most score, with half the scores falling above this figure and half falling below this figure.

Response time for troops. Table V-7 shows the percent of 9-1-1 calls that were responded to within 15 minutes for each of the Troops. In all instances, at least 50 percent of calls were responded to within 15 minutes. Examining the change from FY 09 to FY 12, some Troops improved by having a higher percent of calls responded to within 15 minutes (Troops E and G), while most Troops lost ground, and had a lower percent of calls responded to within 15 minutes (Troops A, B, C, D, F, K, L). Troops H and I had the highest percent of calls responded to within 15 minutes in FY 12, and this remained unchanged from the percent of calls responded to within 15 minutes in FY 09.

Table V-7. Percent of 9-1-1 Calls Responded to Within 15 Minutes					
Troop¹	FY 09	FY 10	FY 11	FY 12	Change from FY 09 to FY 12
A	73%	73%	73%	71%	-3%
B	56%	55%	55%	51%	-7%
C	63%	61%	61%	60%	-5%
D	56%	51%	50%	50%	-12%
E	68%	70%	69%	69%	+1%
F	69%	68%	65%	64%	-7%
G	68%	70%	68%	69%	+1%
H	77%	77%	76%	77%	No change
I	72%	73%	71%	72%	No change
K	58%	56%	54%	56%	-3%
L	69%	70%	67%	66%	-4%
Total	67%	67%	66%	66%	-1%

¹Excludes Troop W, a federally funded airport security troop.
Source: CSP CAD Data.

While Troop H had the highest percent of calls responded to within 15 minutes (77 percent) in FY 12, Troop D had just half of responses within 15 minutes. Geographic and population differences likely contribute to these differences (Table V-8). A later analysis will examine the role that staffing level may play in response time.

Table V-8. Geographic and Population Differences				
	2010 Population	Population Density	State Highway Miles Covered	% of Calls Responded to Within 15 Minutes
Troop D	88,843 (2 nd lowest)	199 (2 nd lowest)	293 (4 th lowest)	50%
Troop H	819,431 (highest)	1,343 (3 rd highest)	773 (highest)	77%

Source: 2000 & 2010 Census Data

Response time for different incidents. In analyzing response times, the type of call being responded to must be taken into consideration. As noted in the guidelines for starting and

operating a new police department,⁵⁹ true emergencies will require a more rapid response than non-emergency types of calls. Although there is not a formal system for prioritizing 9-1-1 calls handled within the CSP dispatch system, there are types of calls that are generally understood to be of high priority: accidents with fatalities or injuries, domestic violence, robbery, assault, and untimely deaths. The response times for each of these types of calls are analyzed in this section.

Response Time for Calls of Accidents with Non-Fatal Injuries

Figure V-4 shows the median annual response times for highway accidents with nonfatal injuries and accidents with fatal injuries. On average, the response time for accidents with non-fatal injuries improved somewhat, although the response time for fatal accidents became somewhat longer.

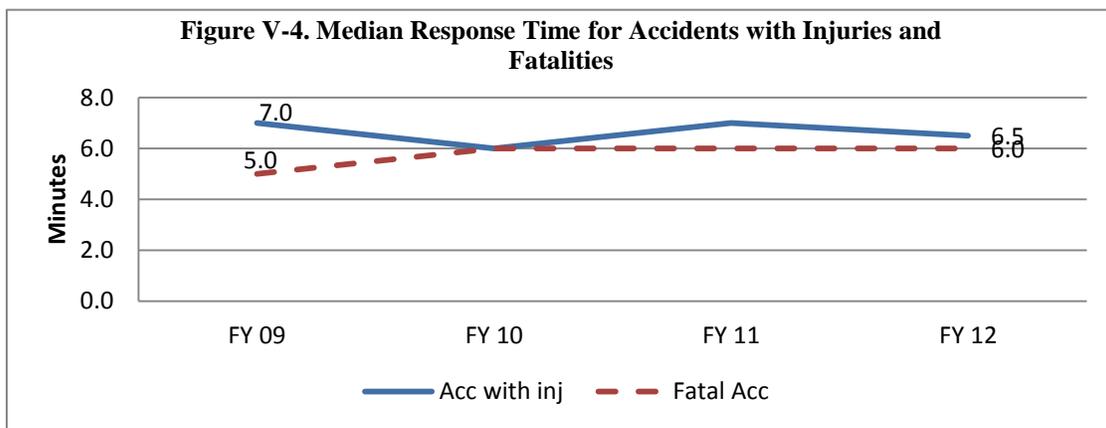


Table V-9 breaks out response time for accidents with non-fatal injuries into categories. More than half the response times for such accidents occurred within 15 minutes, ranging from 83-86 percent. Overall, the number of accidents with non-fatal injuries decreased by 13 percent from FY 09 to FY 12.

Table V-9. CSP Response Time for Accidents with Injuries –Not Fatal: FY 09-FY 12				
Response Time	FY 09	FY 10	FY 11	FY 12
1-5 minutes	39%	42%	41%	42%
6-10 minutes	29%	30%	29%	30%
11-15 minutes	15%	14%	15%	14%
16-20 minutes	7%	6%	7%	7%
21-25 minutes	4%	3%	3%	3%
26-30 minutes	2%	2%	2%	1%
31-45 minutes	2%	2%	2%	1%
46-60 minutes	1%	1%	1%	0%
1-2 hours	0%	1%	1%	1%
More than 2 hours	1%	0%	0%	0%
Total calls with response time	2,811	2,587	2,502	2,433
Source: CSP CAD Data.				

⁵⁹ Guidelines for Starting and Operating a new Police Department, U.S. Department of Justice, Office of Community Oriented Policing Services (COPS), by Deborah Spence, Barbara Webster, and Edward Connors.

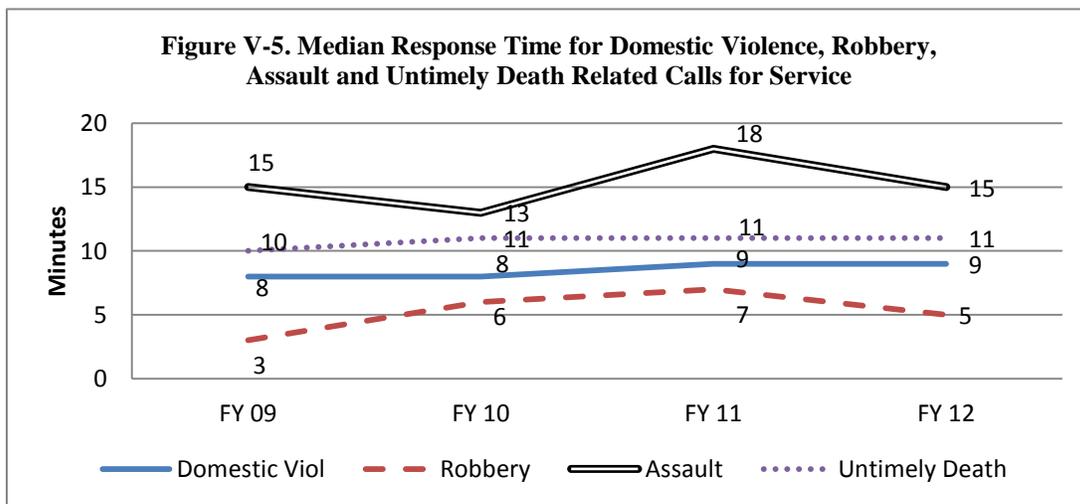
Response Time for Calls of Accidents with Fatal Injuries

Table V-10 breaks out fatal accident response times into the same 10 categories. As was the case with accidents with non-fatal injuries, much more than three-quarters were responded to within 15 minutes, ranging from 90-96 percent.

Response Time	FY 09	FY 10	FY 11	FY 12
1-5 minutes	51%	46%	49%	43%
6-10 minutes	36%	32%	30%	34%
11-15 minutes	9%	15%	11%	13%
16-20 minutes	1%	2%	4%	5%
21-25 minutes	1%	2%	2%	3%
26-30 minutes	0%	1%	2%	1%
31-45 minutes	3%	1%	0%	1%
46-60 minutes	0%	0%	0%	1%
1-2 hours	0%	0%	0%	0%
More than 2 hours	0%	1%	1%	0%
Total calls with response time	115	142	118	103

Source: CSP CAD Data.

Figure V-5 shows the median response time for other serious types of calls including domestic violence, robbery, assault, and untimely death. Note that CSP infrequently responds to robberies, ranging from 27-33 incidents annually for FYs 09-12.



Response Time for Calls of Domestic Violence

Response times are broken out into time categories for each of these serious types of calls. Table V-11 shows domestic violence response times for FYs 09-12. The overall number of calls related to domestic violence increased from FY 09-12 by 20 percent.

The response time for domestic violence calls has increased from FY 09 to FY 12. While 81 percent of domestic violence calls were responded to within 15 minutes in FY 09, the percentage decreased to 75 percent in FY 12. However, using the 15 minute standard of 1997, more than half of domestic violence related calls were responded to within 15 minutes.

PRI is unaware of a different standard or goal for response time for domestic violence calls; however, the public may find it unacceptable to have a certain percent of such calls responded to, for example, more than one hour after help was requested. A later analysis examines response time for domestic violence calls in greater detail.

Table V-11. CSP Response Time for Domestic Violence Calls for Service: FY 09-FY 12				
Response Time	FY 09	FY 10	FY 11	FY 12
1-5 minutes	35%	32%	29%	33%
6-10 minutes	28%	29%	28%	25%
11-15 minutes	18%	16%	18%	17%
16-20 minutes	6%	8%	7%	8%
21-25 minutes	3%	3%	5%	4%
26-30 minutes	2%	3%	3%	2%
31-45 minutes	3%	4%	4%	5%
46-60 minutes	1%	2%	2%	3%
1-2 hours	1%	2%	2%	3%
More than 2 hours	1%	2%	1%	1%
Total calls with response time	788	906	855	944

Source: CSP CAD Data.

Response Time for Calls of Assaults

Table V-12 breaks out the response time for calls coming in as incidents of assaults. There was no statistically significant change in response time for assault calls. Assault response times occurred within 15 minutes approximately 50 percent of the time, dipping below to 46 percent in FY 11. Note the number of assault related calls has declined by 29 percent from FYs 09-12. In FY 11, the year response time fell below 50 percent, one-third of such calls were responded to more than 30 minutes from the time the 9-1-1 call was placed. A later analysis examines response time for assault calls in greater detail.

Table V-12. CSP Response Time for Assault Calls for Service: FY 09-FY 12				
Response Time	FY 09	FY 10	FY 11	FY 12
1-5 minutes	22%	22%	24%	22%
6-10 minutes	16%	18%	12%	16%
11-15 minutes	12%	14%	10%	12%
16-20 minutes	10%	7%	10%	8%
21-25 minutes	8%	7%	7%	9%
26-30 minutes	6%	4%	4%	5%
31-45 minutes	10%	10%	14%	9%
46-60 minutes	4%	6%	7%	5%
1-2 hours	9%	7%	8%	9%
More than 2 hours	3%	5%	4%	5%
Total calls with response time	532	513	418	379

Source: CSP CAD Data.

Response Time for Calls of Robberies

Table V-13 shows the response time for robberies. Although trending toward the direction of increasing response time, there was not a statistically significant increase in response time for robberies from FY 09 to FY 12. These types of calls are quite infrequent for CSP. However, in all four years examined, response rate was well above the 15 minute average set in 1997, occurring from 83 to 96 percent of the time.

Table V-13. CSP Response Time for Robbery Calls for Service: FY 09-FY 12				
Response Time	FY 09	FY 10	FY 11	FY 12
1-5 minutes	78%	46%	40%	52%
6-10 minutes	7%	38%	40%	33%
11-15 minutes	11%	8%	3%	6%
16-20 minutes	0%	3%	11%	3%
21-25 minutes	0%	0%	3%	0%
26-30 minutes	0%	0%	0%	0%
31-45 minutes	0%	0%	0%	6%
46-60 minutes	0%	3%	3%	0%
1-2 hours	4%	3%	0%	0%
More than 2 hours	0%	0%	0%	0%
Total calls with response time	27	37	37	33
Source: CSP CAD Data.				

Response Time for Calls of Untimely Deaths/Homicides

Table V-14 shows the response time for calls received about an untimely death. There was no statistically significant change in response time for untimely deaths. More than half the response times occurred within 15 minutes, ranging from 60 to 67 percent. The number of calls relating to untimely deaths decreased by six percent from FY 09 to FY 12.

Table V-14. CSP Response Time for Untimely Death Calls for Service: FY 09-FY 12				
Response Time	FY 09	FY 10	FY 11	FY 12
1-5 minutes	24%	19%	24%	24%
6-10 minutes	26%	29%	26%	21%
11-15 minutes	14%	19%	16%	15%
16-20 minutes	15%	12%	9%	16%
21-25 minutes	8%	6%	11%	8%
26-30 minutes	4%	9%	6%	6%
31-45 minutes	5%	3%	6%	6%
46-60 minutes	1%	1%	0%	2%
1-2 hours	1%	1%	1%	0%
More than 2 hours	1%	0%	1%	1%
Total calls with response time	242	241	271	227
Source: CSP CAD Data.				

Additional analyses for domestic violence and assault related calls. The Connecticut legislature has focused attention on police response to domestic violence calls, including response time, at different times. While CSP has not set a response time standard for domestic violence 9-1-1 calls, there is particular societal concern that victims of domestic violence be reached in a “timely” manner. Table V-15 shows the number of 9-1-1 calls related to domestic violence responded to by each of the Troops, sworn personnel from multiple Troops, and those assigned to Headquarters or other units.

Table V-15. Number of Calls for Service Related to Domestic Violence by Troop: FY 09-FY 12				
Troop	FY 09	FY 10	FY 11	FY 12
A	130	138	100	55
B	57	54	59	55
C	81	73	47	39
D	74	160	157	190
E	47	64	86	107
F	13	27	26	67
G	12	3	5	14
H	28	46	30	46
I	26	20	25	45
K	94	73	91	160
L	90	96	115	80
Two Different Troops	122	122	87	66
Headquarters	101	80	82	74
Other ¹	11	6	5	3
Total	886	962	915	1,001
¹ E.g., Troop W, Traffic Services Unit. Source: CSP CAD Data.				

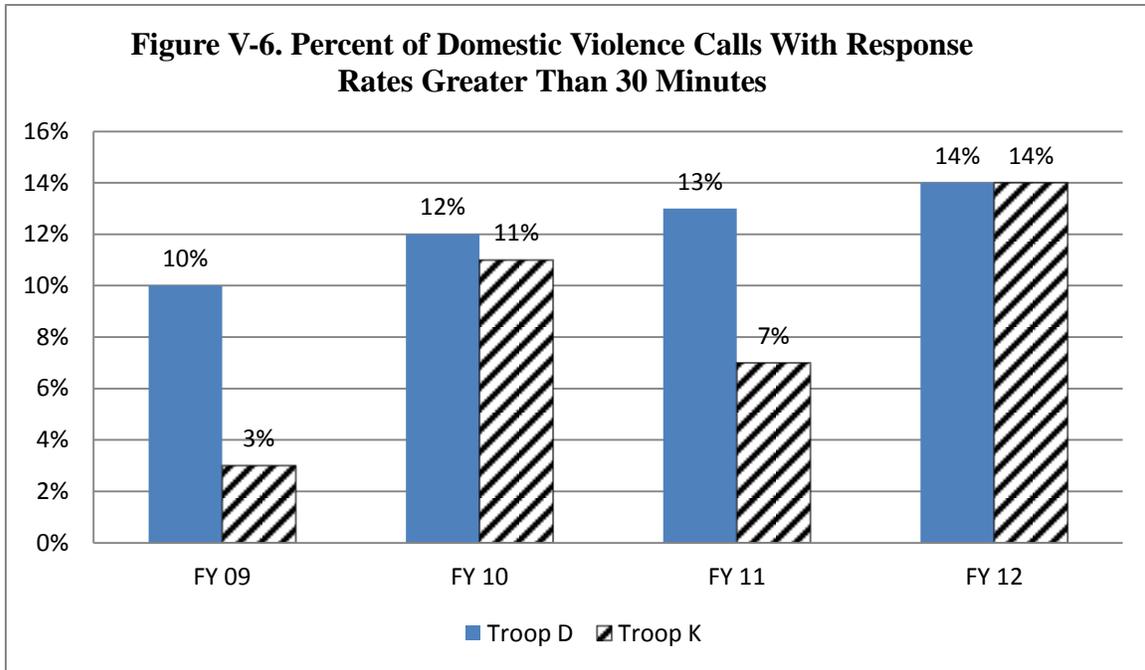
Troops D and K have the largest number of such calls, and Table V-16 shows the response times for these two Troops.

Table V-16. Troops D and K Response Time to Domestic Violence 9-1-1 Calls: FY 09-FY 12

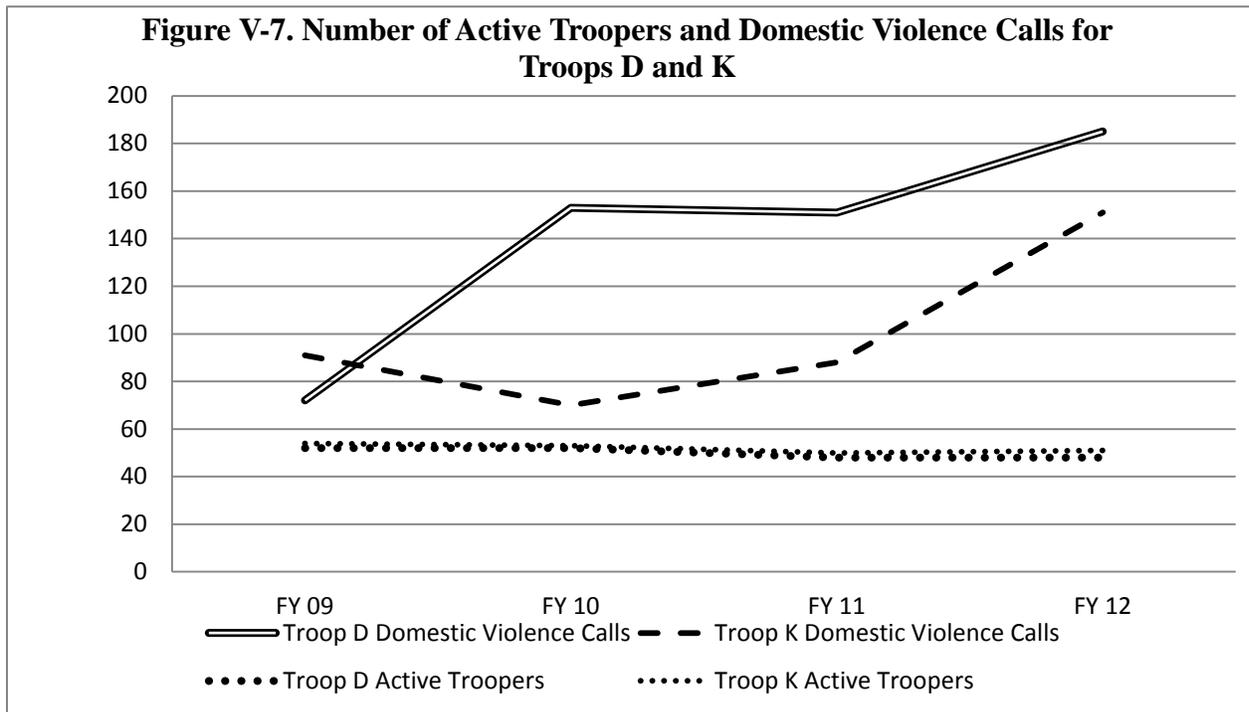
Response Time	FY 09	FY 10	FY 11	FY 12
Troop D				
1-5 minutes	24%	28%	30%	26%
6-10 minutes	33%	26%	17%	26%
11-15 minutes	21%	12%	17%	20%
16-20 minutes	4%	12%	11%	6%
21-25 minutes	7%	6%	7%	5%
26-30 minutes	1%	5%	5%	3%
31-45 minutes	1%	6%	6%	6%
46-60 minutes	3%	2%	2%	4%
1-2 hours	3%	3%	4%	4%
More than 2 hours	3%	1%	1%	0%
Total calls with response time	72	153	151	185
Troop K				
1-5 minutes	22%	30%	15%	29%
6-10 minutes	32%	36%	32%	22%
11-15 minutes	30%	10%	23%	18%
16-20 minutes	7%	7%	14%	12%
21-25 minutes	4%	1%	9%	3%
26-30 minutes	2%	4%	0%	2%
31-45 minutes	2%	3%	2%	6%
46-60 minutes	1%	0%	3%	4%
1-2 hours	0%	7%	2%	3%
More than 2 hours	0%	1%	0%	1%
Total calls with response time	91	70	88	151

Source: CSP CAD Data.

Figure V-6 shows the percent of domestic violence calls that were responded to more than 30 minutes after the 9-1-1 calls were made. Troop K showed an especially big change from FY 09 to FY 12, with the number of domestic violence calls responded to more than 30 minutes—twice the average 15 minute response time—after receipt of the 9-1-1 call more than quadrupling.



Relationship between response time and staffing levels. The number of active troopers in both Troops D and K declined during this four year period by 6-8 percent, translating into a decrease of three-four troopers per Troop. Figure V-7 shows the staffing levels in relation to the number of domestic violence calls for Troops D and K. The greater percent of domestic violence calls with response times of more than 30 minutes is likely associated with the increase in domestic violence calls coupled with the decrease in troopers.



Assaults. Table V-17 shows the number of 9-1-1 calls related to assaults responded to by each of the Troops, sworn personnel from multiple Troops, assigned to Headquarters or other units.

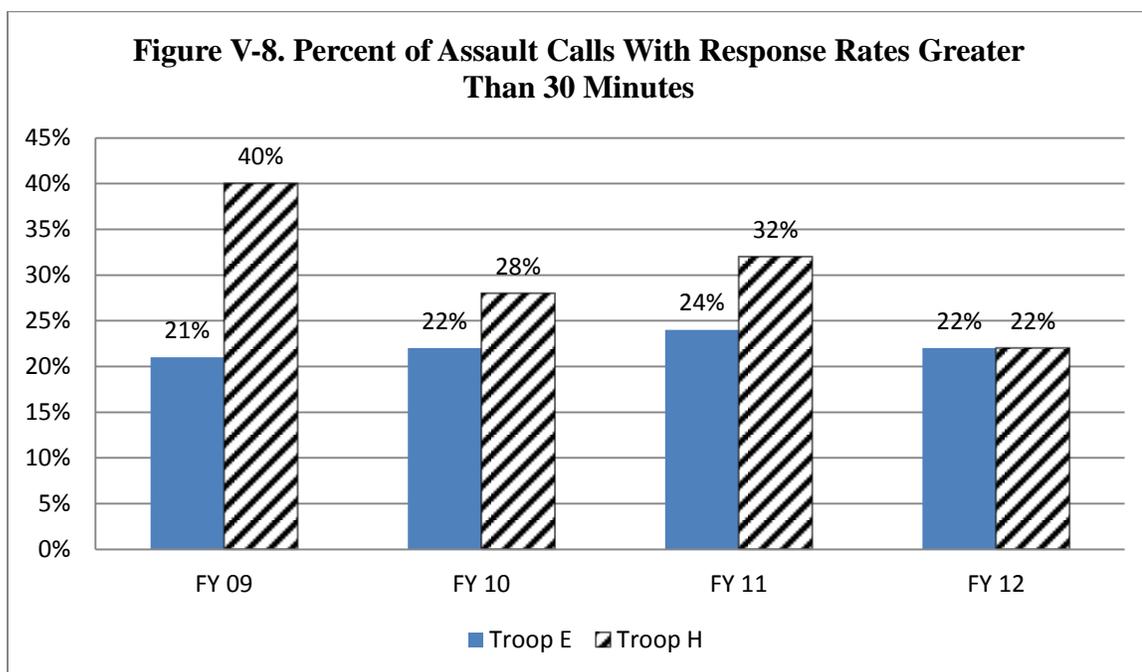
Table V-17. Number of Calls for Service Related to Assaults: FY 09-FY 12				
Troop	FY 09	FY 10	FY 11	FY 12
A	43	64	47	40
B	16	19	12	11
C	38	34	23	35
D	21	20	26	18
E	88	90	52	72
F	41	22	23	16
G	25	22	26	25
H	63	70	53	63
I	55	71	67	59
K	35	32	30	13
L	42	30	27	29
Two Different Troops	55	38	23	11
Headquarters	69	40	36	14
Other ¹	7	5	3	2
Total	598	557	448	408
¹ E.g., Troop W, Traffic Services Unit. Source: CSP CAD Data.				

Troops E and H have the largest number of such calls, and Table V-18 shows the response time for these two Troops. Troop E, which includes the casino areas, responded to assault calls within 15 minutes more than half the time during FYs 09-12, ranging from 57-62 percent. Troop H responded to assault calls within 15 minutes for at least half such calls in two of the four years (FY10 and FY 12).

Table V-18. Troops E and H Response Time to Assault 9-1-1 Calls: FY 09-FY 12				
Response Time	FY 09	FY 10	FY 11	FY 12
Troop E				
1-5 minutes	31%	24%	39%	25%
6-10 minutes	16%	17%	12%	22%
11-15 minutes	10%	16%	10%	15%
16-20 minutes	12%	8%	8%	9%
21-25 minutes	7%	6%	6%	7%
26-30 minutes	2%	6%	0%	0%
31-45 minutes	6%	5%	10%	10%
46-60 minutes	5%	5%	6%	6%
1-2 hours	8%	6%	6%	3%
More than 2 hours	2%	6%	2%	3%
Total calls with response time	83	82	49	68
Troop H				
1-5 minutes	13%	11%	20%	20%

6-10 minutes	13%	32%	8%	17%
11-15 minutes	10%	11%	10%	18%
16-20 minutes	11%	8%	10%	8%
21-25 minutes	6%	3%	6%	12%
26-30 minutes	6%	8%	12%	3%
31-45 minutes	16%	12%	10%	7%
46-60 minutes	3%	5%	10%	7%
1-2 hours	15%	6%	10%	8%
More than 2 hours	6%	5%	2%	0%
Total calls with response time	62	65	49	60
Source: CSP CAD Data.				

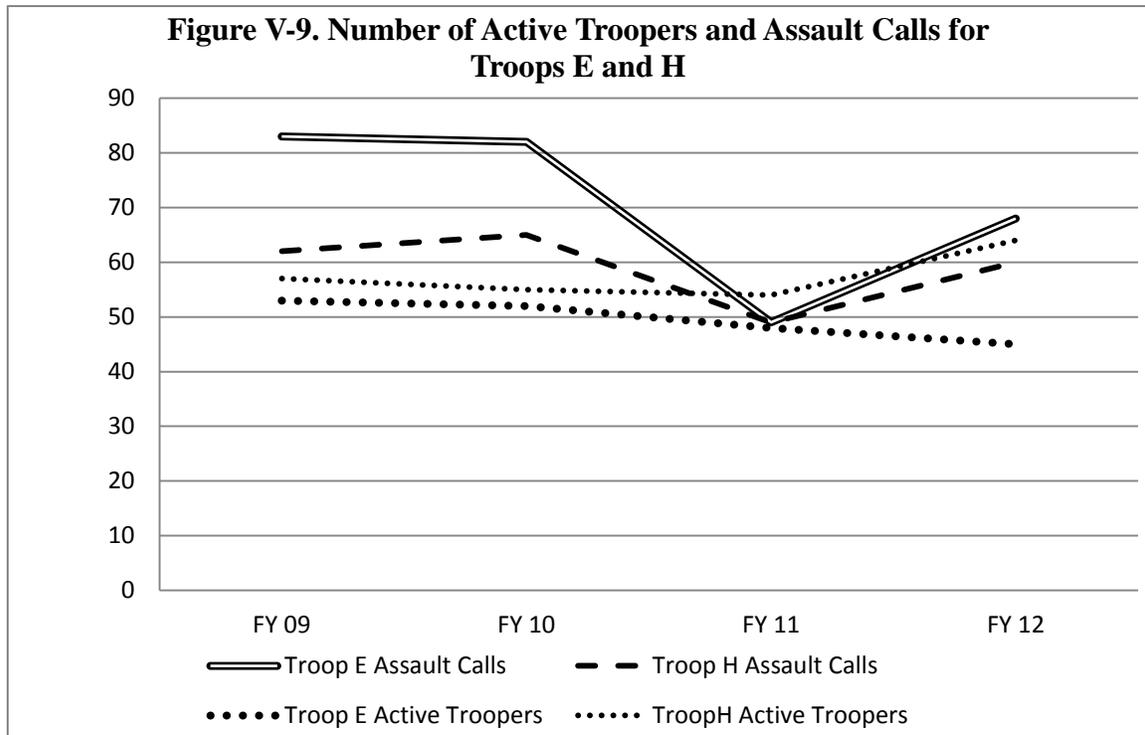
Figure V-8 shows the percent of assault calls that were responded to in at least double the 15 minute response time--more than 30 minutes after the 9-1-1 call was made. While Troop E has a relatively stable 21-24 percent of assault related calls responded to in more than 30 minutes, variability is much greater for Troop H, ranging from 22-40 percent of such calls being responded to in more than 30 minutes.



Relationship between response time and staffing levels. As pointed out in a Virginia patrol staffing study,⁶⁰ the level of staffing can have an impact on response time. With more troopers on patrol, for example, there is a greater likelihood they are dispersed, and thus closer to the location where they are needed.

⁶⁰ Review of the Virginia Patrol Staffing Formula: A Report to the Governor, Senate Finance Committee, and the House Appropriations Committee, September 2003.

The number of active troopers in Troop E declined during this four year period by 15 percent, translating into a decrease of eight troopers. The reverse occurred for Troop H, where, due to the merger with Troop W in FY 12, there was a 12 percent increase during this four year period, resulting in seven additional troopers. The improvement in assault response time in FY 12 could be related to this trooper increase. However, Troop E continued to maintain a relatively stable response time for assaults despite their staffing decline, perhaps due to the decrease in 9-1-1 calls related to assaults (Figure V-9). Except for FY 11, Troop H had approximately 60-65 assault calls annually.



Summary

Overall, the CSP median response time has increased by 1 minute from 9 to 10 minutes in FY 09 to FY 12. Applying the 15 minute average response time standard described in the 1997 PAM Study of CSP, however, the elevated response time is still within the average 15 minute standard. This standard is also met by each individual Troop. Although there was a decline in CSP sworn officers, the decline in number of 9-1-1 calls for service may play a role in maintaining this 15 minute minimum average. Examining response time for more serious types of incidents, PRI staff found:

- 83-86% of accidents with non-fatal injuries were responded to within 15 minutes
- 90-96% of fatal accidents were responded to within 15 minutes
- 75-81% of domestic violence incidents were responded to within 15 minutes
- 83-96% of robberies were responded to within 15 minutes
- 46-54% of assaults were responded to within 15 minutes
- 60-67% of untimely death related calls were responded to within 15 minutes

Some police departments set more stringent response times for the most serious types of calls for service. The U.S. Bureau of Justice issued a report in 2007⁶¹—the most recent available with response time information—with national data on police agency response times for incidences of violence. The report broke response times into categories, with responses of five minutes or less occurring 24.9% of the time, and of 10 minutes or less occurring 53.4% of the time. Applying a 15 minute average response time to the more serious offences may not be stringent enough in Connecticut.

In examining the two Troops with the highest number of domestic violence related calls, an increasing percent of such calls (14% in FY 12) had a more than 30 minute response time. Similarly, in examining the two Troops with the highest number of assault related 9-1-1 calls, 22% of such calls took more than 30 minutes for CSP to respond to in FY 12.

In its 2010 police staffing study,⁶² Glendale, Arizona established priority levels for calls for service, with 5 minute response time standards for “hot calls” (i.e., shooting, armed robbery, violence) and emergency calls (e.g., injury accidents, arguments, panic alarms). They further established a 15 minute response standard for urgent calls (such as suspicious activity, routine alarms) and a 35 minute response time standard for the remainder of calls.

Another example of setting response time standards or goals was described in the 2007 Oro Valley Police Officer Staffing Report, where the following performance objectives were set:

- The PD expects to arrive at all Priority One calls for service in less than 5 minutes, 90% of the time
- The PD expects to arrive at all Priority Two calls for service in less than 8 minutes, 90% of the time

While setting response time standards for serious 9-1-1 calls across an entire state is more challenging than setting standards for a city police department, the assessment of the performance of CSP cannot be made without expectations for service. Although there is a correlation between staffing levels and response time, with overall response time decreasing as staffing levels have decreased, there are several ways in which this issue may be addressed. For example, in a police staffing study that discussed ways to decrease call response times,⁶³ the following options were identified:

- Increase patrol staffing by hiring additional officers
- Change patrol deployment methods (i.e., squad versus platoon systems or work week days on/off)
- Address the types of calls that officers respond to and eliminate some of those responses

⁶¹ U.S. Bureau of Justice Statistics Criminal Victimization in the U.S. Report, 2007.

⁶² Glendale Police Staffing Study 210: City of Glendale, Arizona.

⁶³ Oro Valley Police Department Police Officer Staffing Report, February 7, 2007.

- Eliminate automatic dispatch of police to all medical calls made through 911
 - Eliminate police response to residential and business alarms, even after the alarm company has sent a “false alarm” notification
 - Eliminate police response to vehicle lock-outs and other public assist calls
- Cut services and programs in order to reassign police officers to patrol, which would increase the patrol staffing levels

Crime Rates

Theory being tested:

As staffing levels **decreased**, crime rates **increased**

Findings:

- As staffing levels decreased, similar to the national trend, Crime Index offense rates in Connecticut also decreased during 2001-2010 (e.g., murder, rape, burglary)
 - Nationally, violent crime has been decreasing approximately 2.4% annually since 1991, and property crimes by 2.3% annually during the same time period
- Approximately two-thirds of Crime Index offenses occurred within the CSP Eastern District
- As staffing levels decreased, the rate of other serious Group A crimes in Connecticut also decreased from FY 09 to FY 12
- As staffing levels decreased, the number of Group B crimes of disorderly conduct and trespassing decreased
 - The number of DUI (Group B crime), however, increased 20% from FY 09 to FY 12
 - Despite a 79% decline in the Auto theft Unit--from an average of 13.6 sworn officers in FY 09 to 2.9 sworn personnel in FY 12--the incidence of auto thefts did not increase

Conclusion:

Since the Crime Index offenses and other Group A offenses decreased at the same time the number of CSP sworn officers decreased, crime reduction cannot be attributed to the efforts of CSP. The Group B crime DUI increased as overall staffing levels decreased; however, individual Troop rates for DUI were not consistently found to be related to Troop staffing level changes

The purpose of CSP is to protect public and trooper safety. Occurrence of crime is one measure of public safety. Presence of state police may act as a deterrent for certain crimes, and the efforts of some specialized units such as Major Crimes and the Bureau of Criminal Investigations may also impact crime.

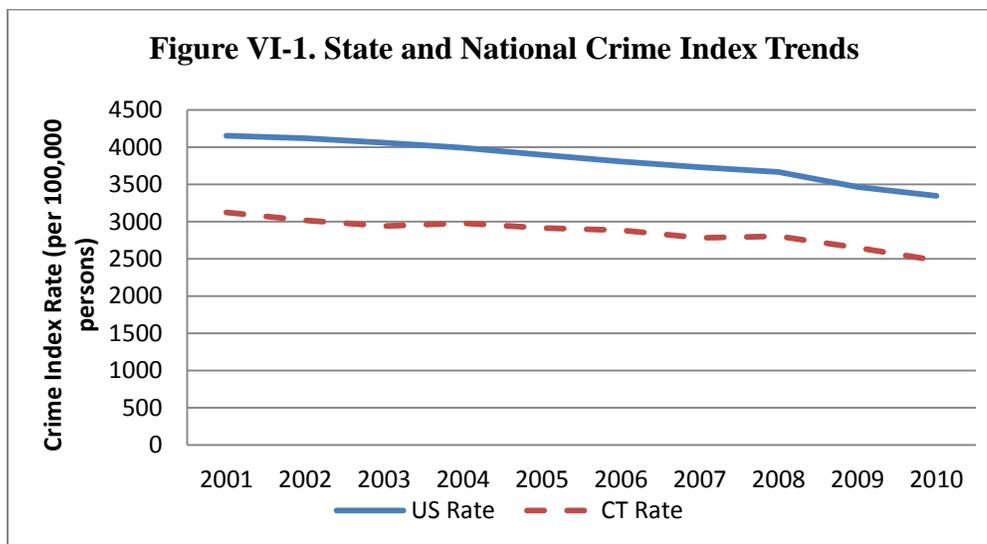
The CSP Crimes Analysis Unit compiles information annually on criminal offenses and arrests in Connecticut. Called "Crime in Connecticut," the information is based on uniform crime reporting data submitted to CSP monthly by law enforcement agencies throughout Connecticut.

The information is subsequently provided to the Federal Bureau of Investigation for national crime counts. The Crime in Connecticut Report presents information on the Crime Index, a national measure of serious crimes committed. There are seven offenses that make up the Crime Index:

- murder;
- rape;
- robbery⁶⁴;
- aggravated assault⁶⁵;
- burglary;
- larceny-theft⁶⁶; and
- motor vehicle theft.

Some states also include arson in the Crime Index; however, Connecticut omits this highly under-reported crime. The seven crimes are further grouped into violent crimes (murder, rape, robbery, and aggravated assault) and property crimes (burglary, larceny-theft, and motor vehicle theft).

Taken from the most recently available Crime in Connecticut Report (published April 2012), Figure VI-1 shows state data on the Crime Index for calendar years 2001 through 2010. Similar to the national trend, Crime Index rates in Connecticut decreased during 2001-2010. These figures do not distinguish between crimes that occurred within CSP jurisdictions vs. municipal police department jurisdictions.



⁶⁴ Definition of “robbery”: Taking or attempting to take anything of value from the care, custody, or control of a person or persons by force, threat of force or violence, or by putting the victim in fear.

⁶⁵ Definition of “aggravated assault”: Unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault usually is accompanied by the use of a weapon or by means likely to produce death or great bodily harm.

⁶⁶ Definition of “larceny”: Unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another.

PRI staff examined crime data specifically within the jurisdiction of CSP. This includes 81 towns, Foxwoods and Mohegan Sun casinos, and a small section of Putnam. The CSP jurisdiction also includes calls that CSP handled in towns with their own police departments.

Table VI-1 shows the number of Crime Index offenses that were handled by CSP from FY 09 through FY 12. The most frequent of these crimes, larceny-theft, does not appear to be increasing. Overall, there was a six percent decrease in offenses in the Crime Index, driven in large part by the nine percent decrease in larceny-theft.

Table VI-1. Number of Crime Index Offenses Handled by CSP				
Offense	FY 09	FY 10	FY 11	FY 12*
Murder	6	9	2	4
Rape	63	55	45	52
Robbery	47	60	57	48
Aggravated Assault	201	197	180	156
Burglary	1,378	1,474	1,438	1,464
Larceny-theft	3,126	3,007	2,849	2,845
Motor vehicle theft	273	255	211	221
Total	5,094	5,057	4,782	4,790

Source: Uniform Crime Reporting data (UCR) collected by CSP.
 *June 2012 unavailable; however July 2011-through May 2012 data adjusted to a 12-month estimate.

PRI also analyzed other serious offenses (“Group A offenses”) that are not part of the Crime Index. The most frequently occurring of these offenses are shown in Table VI-2. From FY 09 to FY 12, the total number of such crimes decreased.

Table VI-2. Number of Other Serious Offenses Handled by CSP				
Offense	FY 09	FY 10	FY 11	FY 12*
Drug/narcotic violation	2,668	2,079	2,191	1,493
Destruction/Damage/Vandalism	1,266	1,143	1,021	936
Simple Assault	1,927	1,869	1,805	1,815
Intimidation	987	987	855	771
Other	1,545	1,403	1,280	1,233
Total	8,393	7,481	7,152	6,248

Source: Uniform Crime Reporting data (UCR) collected by CSP.
 *June 2012 unavailable; however July 2011-through May 2012 data adjusted to a 12-month estimate.

Another category of crimes, called Group B crimes, are of a less serious nature. Table VI-3 shows the most frequently occurring Group B offenses handled by CSP. More incidences of disorderly conduct and trespassing occurred in FY 09 compared with FY 10-FY 12. DUI offenses increased 20 percent from FY 09 to FY 12.

Table VI-3. Number of Group B Offenses Handled by CSP				
Offense	FY 09	FY 10	FY 11	FY 12*
DUI	2,098	2,494	2,471	2,518
Disorderly Conduct	617	463	497	474
Trespassing	132	113	46	81
Other	2,372	2,779	2,776	2,761
Total	5,219	5,849	5,790	5,834

Source: Uniform Crime Reporting data (UCR) collected by CSP.
 *June 2012 unavailable; however July 2011-through May 2012 data adjusted to a 12-month estimate.

Crimes do not occur uniformly across the three CSP districts. Figure VI-2 shows the percent of crime index offenses for each district (and headquarters). Information from FY 11 was used, the most recent year for which there was complete information. The Eastern District accounts for almost two thirds of all index crimes. A district consists of activity by individual Troops and district headquarters. Some crimes were responded to by CSP Headquarters personnel during their general patrol time to and from work.

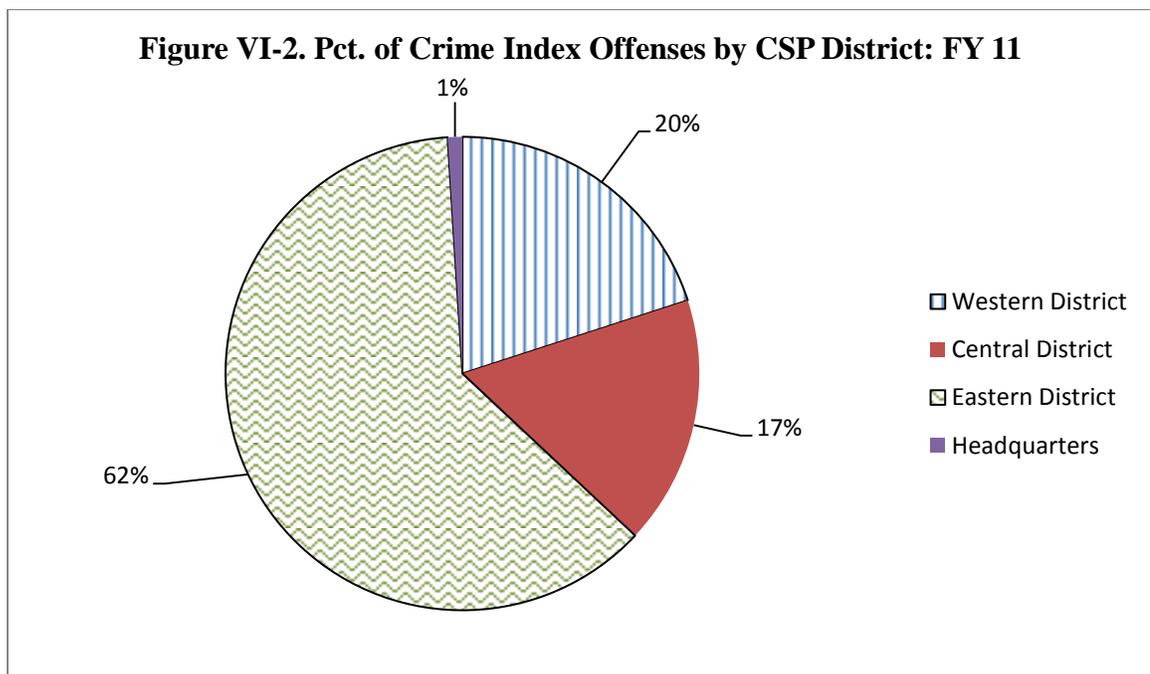


Table VI-4 provides detail on the crime index offenses for individual troops or units (excluding some offenses that were responded to by the district headquarters staff). Approximately 61 percent of crime index offenses occurred in the Eastern District troops/unit.

Table VI-4. Incidences of Crime Index Offenses in FY 11			
Troop/Unit	Number	Percent	District
Troop E	802	17%	Eastern
Troop K	796	17%	Eastern
Troop D	584	12%	Eastern
Troop C	523	11%	Eastern
Troop F	409	9%	Central
Troop A	367	8%	Western
Troop L	300	6%	Western
Troop I	227	5%	Central
Troop B	227	5%	Western
Casino Unit	191	4%	Eastern
Troop H	109	2%	Central
Troop G	67	1%	Western
Other ¹	142	3%	
TOTAL	4,782		

¹Other includes district headquarters, CSP headquarters, and Troop W.
Source: Uniform Crime Reporting data (UCR) collected by CSP.

Similarly, other Group A offenses (Table VI-5) and Group B offenses (Table VI-6) handled by CSP are shown for individual troops or units. The Eastern District continues to have a higher percentage of both other serious offenses and Group B offenses (43 percent and 47 percent, respectively) than the Central and Western Districts.

Table VI-5. Incidences of Other Group A Offenses in FY 11			
Troop/Unit	Number	Percent	District
Headquarters	998	14%	
Troop E	953	13%	Eastern
Troop D	674	9%	Eastern
Troop K	627	9%	Eastern
Troop C	585	8%	Eastern
Troop L	567	8%	Western
Troop A	519	7%	Western
Troop F	429	6%	Central
Troop H	395	6%	Central
Troop I	353	5%	Central
Troop B	308	4%	Western
Casino Unit	262	4%	Eastern
Troop G	251	4%	Western
Other ¹	231	3%	
TOTAL	7,152		

¹Other includes district headquarters, CSP headquarters, Troop W, Fire Marshall, and Traffic Services Unit.
Source: Uniform Crime Reporting data (UCR) collected by CSP.

Table VI-6. Incidences of Group B Offenses in FY 11			
Troop/Unit	Number	Percent	District
Troop E	939	16%	Eastern
Troop D	692	12%	Eastern
Troop G	593	10%	Western
Troop C	538	9%	Eastern
Troop K	518	9%	Eastern
Troop H	514	9%	Central
Troop F	445	8%	Central
Troop A	436	8%	Western
Troop L	430	7%	Western
Troop I	322	6%	Central
Troop B	207	4%	Western
Casino Unit	74	1%	Eastern
Other ¹	82	1%	
TOTAL	5,790		

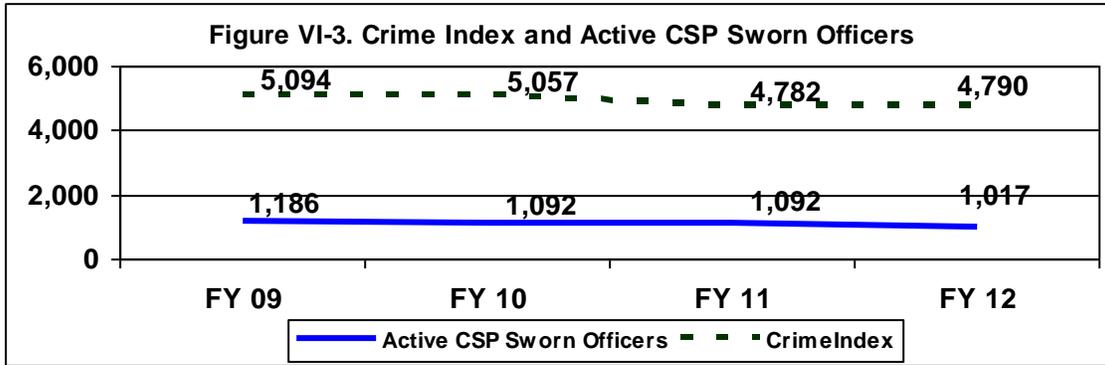
¹Other includes district headquarters, CSP headquarters, Troop W, and Traffic Services Unit.
Source: Uniform Crime Reporting data (UCR) collected by CSP.

Relationship between crime and state police staffing levels. Presence of state police may act as a deterrent for certain crimes. The CSP patrol troopers and resident state troopers who are visible in their assigned areas may potentially prevent certain crimes. Additionally, most sworn personnel drive police cruisers to and from their regular assignments and are a presence on the highways and secondary roadways. As the number of CSP sworn personnel decreases, their presence would also decrease.

Additionally, there are specialized units that work proactively to prevent future crimes from occurring. The Major Crimes Unit and Bureau of Criminal Investigations staffing levels may also impact the Crime Index.

Figure VI-3 shows the average annual number of active CSP sworn officers⁶⁷ and number of Crime Index rates for FY 09 to FY 12 (A similar pattern occurred for the other Group A offenses). Since Crime Index offenses decreased at the same time the number of active CSP sworn officers decreased, the reduction in Crime Index offenses cannot be attributed to the efforts of CSP. Conversely, a reduction in Crime Index offenses might also suggest that fewer sworn personnel are needed to investigate such crimes.

⁶⁷ Active CSP sworn officers are those not on leave or light duty.



Given that previous analyses showed crimes occurring at different rates across the Troops, staffing level trends for troops was examined in relation to Group B offenses. Patrol and resident state troopers would be the personnel most likely to directly impact crime rates through patrolling and police presence, perhaps for Group B offenses in particular. Figure VI-4 shows the average number of active patrol/resident state troopers and average number of monthly Group B crime rates for FY 09 to FY 12. While Group B crimes increase and decrease, the active number of patrol and resident state troopers tends to decrease, and there is no statistically significant correlation between the number of active patrol/resident state troopers and incidences of Group B crimes.

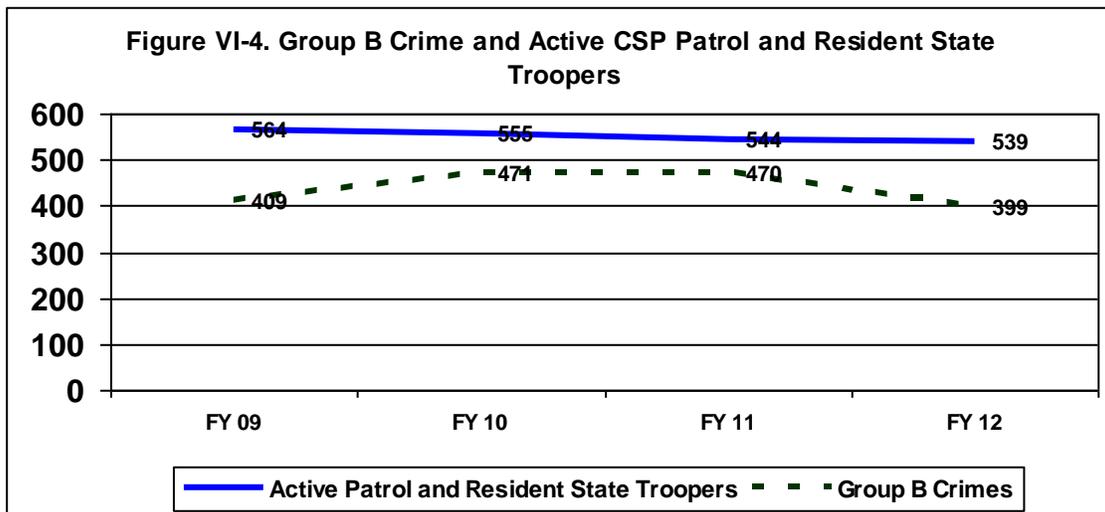
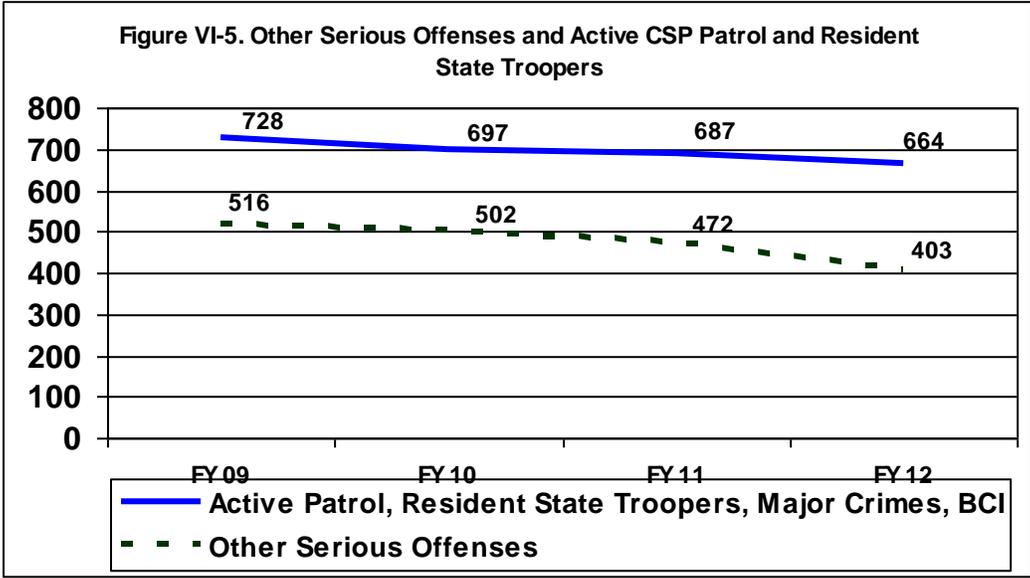
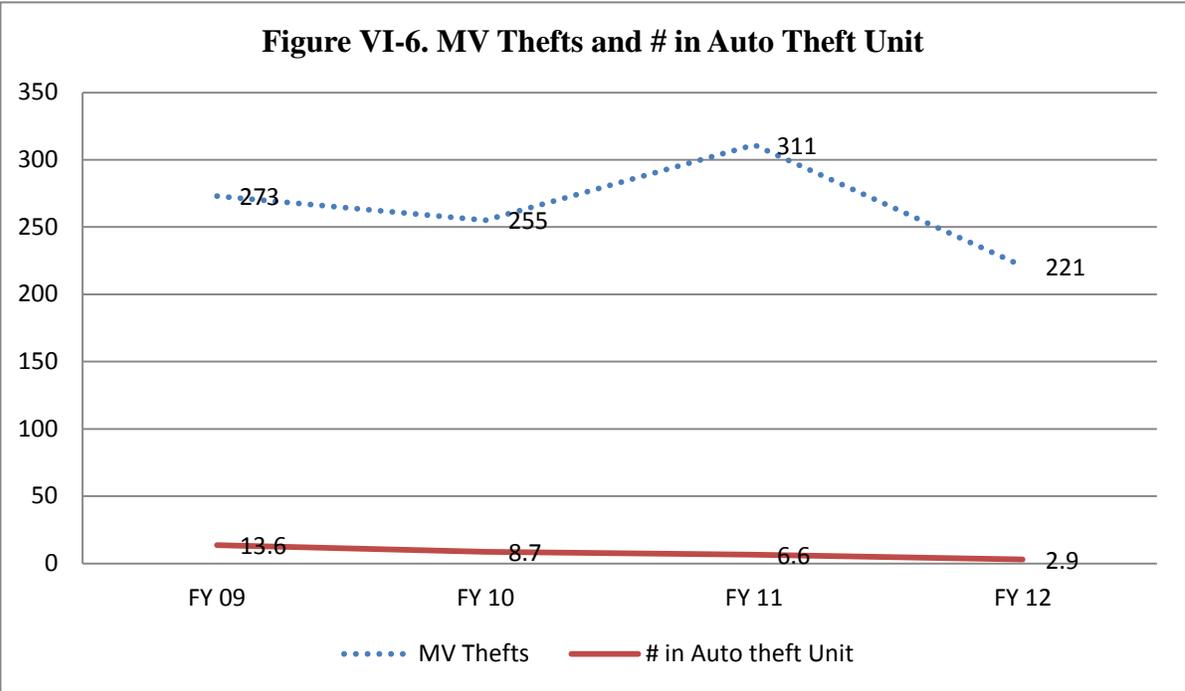


Figure VI-5 shows the combined average number of active patrol/resident state troopers, Major Crimes and BCI personnel, and the average number of other serious offenses (Group A) for FY 09 to FY 12. Although both decrease, the decrease in other serious offenses appears to decline more sharply than the combined number of active patrol, resident state troopers, and Major Crimes and BCI personnel. PRI staff found no statistically significant correlation between staffing levels and reported incidences of other Group A offenses.



Auto theft. One of the specialized units within BCI is the Auto theft Unit described in the Background chapter. Figure VI-6 shows the number of motor vehicle thefts in the Crime Index and the staffing level of the Auto theft Unit from FY 09 to FY 12. As there is a decrease in the number of Auto theft Unit sworn personnel, there is an unrelated number of auto theft decreases and increases during this four year period.



Summary

In summary, there is both a national and state trend of declining crime. Nationally, for example, the Uniform Crime Reports show violent crime has been decreasing approximately 2.4 percent annually since 1991, and property crimes have similarly been decreasing at an average rate of 2.3 percent during this same period. It is not surprising, therefore, that there is no relationship between the slight decline in Connecticut state police staffing levels and incidences of Crime Index crimes, other serious (Group A) offenses, and Group B offenses occurring within the CSP jurisdiction.

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Crime Clearance Rates

Theory being tested:

As staffing levels **decreased**, crime clearance rates **decreased**

Findings:

- Arrest is the predominant means for clearing a case (98.6% of the time)
- With the exception of rape and murder clearance rates, CSP compares favorably with the national average clearance rates for the other five Crime Index offenses
- There is no overwhelming evidence that crime clearance rates were significantly impacted by the decrease in staffing levels
- Crime Index offenses were cleared in a significantly shorter period of time in FY 09 compared with FY 10 and FY 11
 - But Group B offense clearance rates improved with each successive year from FY 09 to FY 11

Conclusion:

Clearance rates do not appear to have suffered significantly with the reduction in staffing levels, although the amount of time needed to clear Crime Index offenses increased at the same time staffing levels decreased. An alternative explanation for the increased time needed to clear cases is, due to the greater sophistication of investigative techniques, more time is spent on individual cases

In addition to information on occurrence of crimes, the CSP Crimes Analysis Unit collects data on clearance or case solvability. According to the Federal Bureau of Investigation Uniform Crime Reporting Program, crimes may be solved/cleared by either arrest or exceptional means:

- Cleared by arrest: Requires that at least one person has been: 1) arrested; 2) charged with a crime; and 3) turned over to the court for prosecution (whether following arrest, court summons, or police notice).
- Cleared by exceptional means: Requires that the police have: 1) identified the offender; 2) gathered enough evidence to support an arrest, make a charge, and turn over the offender to the court for prosecution; 3) identified the offender's exact location so that the suspect could be taken into custody immediately; and 4) encountered a circumstance outside the control of law enforcement that prohibits

the agency from arresting, charging, and prosecuting the offender (e.g., death of the offender, victim refuses to cooperate with the prosecution after the offender has been identified).

National clearance rates are compiled as part of the Uniform Crime Report. This chapter describes the clearance rates for crimes that occurred under the jurisdiction of CSP during FY 09 through FY 11, and compares them with the national averages. The fiscal years FY 09 through FY 11 were chosen for this analysis because they are the three most recent full years of data available and allow for a minimum of one year to solve a crime.

Clearance rates for crimes under the jurisdiction of CSP. All crimes in the Uniform Crime Report contain information on clearance rates. All Group B crimes have a status of cleared by arrest. However, not all Group A crimes have been cleared. The focus of this portion of the analysis, therefore, is on Group A crimes, and Crime Index offenses in particular.⁶⁸

Clearance Rates for Crime Index Offenses

Table VII-1 shows the different ways Crime Index offenses under the jurisdiction of CSP are cleared. As shown for FY 11, arrest is the predominant means for clearing a case, accounting for 98.6 percent of all clearances. Clearance by exceptional means is a rarity. A similar pattern occurs for FY 09 and FY 10.

Table VII-1. Types of Clearance for FY 11 Crime Index Offenses	
Reason for Clearance	Number Cleared
Death of Offender	1
Prosecution Declined	44
Victim Refused to Cooperate	8
Juvenile/No Custody	3
Arrest	3857
Total Cleared	3,913
Source: Uniform Crime Reporting data (UCR) collected by CSP.	

Table VII-2 shows the clearance rates for offenses contained in the Crime Index that were committed in FYs 09-11. While a crime could have been cleared on the same day it occurred, officers may continue to work on solving cases for one or more years.

The total CSP Crime Index clearance rates show a positive, but not statistically significant, trend from FY 09 to FY 11. There were, however, some statistically significant clearance rate differences for particular types of offenses. The FY 11 clearance rates for larceny-theft, for example, increased, while burglaries decreased.

⁶⁸ Crime Index offenses are: murder, rape, robbery, aggravated assault, burglary, larceny-theft, and motor vehicle theft. Other Group A crimes include drug/narcotic violations, destruction/damage/vandalism, simple assault, and intimidation. Group B offenses include DUI, disorderly conduct, and trespassing.

Table VII-2. Clearance Rates for Crime Index Offenses Handled by CSP						
Offense	FY 09		FY 10		FY 11	
	Percent	(number)	Percent	(number)	Percent	(number)
Murder	66.7%	(6)	55.6%	(9)	50.0%	(2)
Rape	38.1%	(63)	25.5%	(55)	37.8%	(45)
Robbery	42.6%	(47)	55.0%	(60)	63.2%	(57)
Aggravated Assault	74.1%	(201)	65.5%	(197)	77.2%	(180)
Burglary	19.7%	(1,378)	19.3%	(1,474)	15.8%	(1,438)
Larceny-theft	25.3%	(3,126)	27.5%	(3,007)	29.2%	(2,849)
Motor vehicle theft	20.5%	(273)	18.0%	(255)	22.7%	(211)
Total	25.8%	(5,094)	26.5%	(5,057)	27.2%	(4,782)

Source: Uniform Crime Reporting data (UCR) collected by CSP.

Clearance Rates for Other Serious Offenses

Table VII-3 shows the clearance rates for serious offenses not in the Crime Index. The overall total other serious offense clearance rate appears relatively stable and does not differ statistically from FY 09 to FY 11. However, there are certain differences among the individual offenses. For example, while clearance rates for drug/narcotic violations increased from FY 09 to FY 11, both simple assaults and intimidation clearance rates decreased during this same time period.

Table VII-3. Clearance Rates for Other Serious Offenses Handled by CSP						
Offense	FY 09		FY 10		FY 11	
	Percent	(number)	Percent	(number)	Percent	(number)
Drug/narcotic violation	53.2%	2,668	60.5%	2,079	61.5%	2,191
Destruction/Damage/ Vandalism	17.9%	1,266	18.6%	1,143	16.1%	1,021
Simple Assault	80.0%	1,927	72.6%	1,869	69.9%	1,805
Intimidation	70.3%	987	61.3%	987	61.6%	855
Total Other Serious Offenses	55.7%	8,393	54.5%	7,481	54.7%	7,152

Source: Uniform Crime Reporting data (UCR) collected by CSP.

National Clearance Rates. National Uniform Crime Report data on the Crime Index is produced annually by the Federal Bureau of Investigation in a publication called, “Crime in the United States.” A caveat on using the national data for comparison purposes cautions that demographic, economic and other differences are not taken into account when making direct agency to agency comparisons. Nevertheless, the national data provides a context for interpretation of the CSP data. A change in CSP clearance rates for Crime Index offenses to one that falls below the national average could signify a shortage in personnel potentially impacting this statistic.

Comparison of CSP with National Clearance Rates

Table VII-4 compares national data with the CSP clearance rates for the Crime Index offenses. With the exception of clearance rates for rape and murder, CSP compares favorably with the national average clearance rates.

Table VII-4. National and CSP Clearance Rates for Crime Index Offenses¹						
Offense	2009		2010		2011	
	CSP (FY)	National (CY)	CSP (FY)	National (CY)	CSP (FY)	National (CY)
Murder	66.7%	66.6%	55.6%	64.8%	50.0%	64.8%
Rape	38.1%	41.2%	25.5%	40.3%	37.8%	41.2%
Robbery	42.6%	28.2%	55.0%	28.2%	63.2%	28.7%
Aggravated Assault	74.1%	56.8%	65.5%	56.4%	77.2%	56.9%
Burglary	19.7%	12.5%	19.3%	12.4%	15.8%	12.7%
Larceny-theft	25.3%	21.5%	27.5%	21.1%	29.2%	21.5%
Motor vehicle theft	20.5%	12.4%	18.0%	11.8%	22.7%	11.9%
Total	25.8%	22.1%	26.5%	21.8%	27.2%	21.9%

¹Excludes arson.
Source: Uniform Crime Reporting data (UCR) collected by CSP.

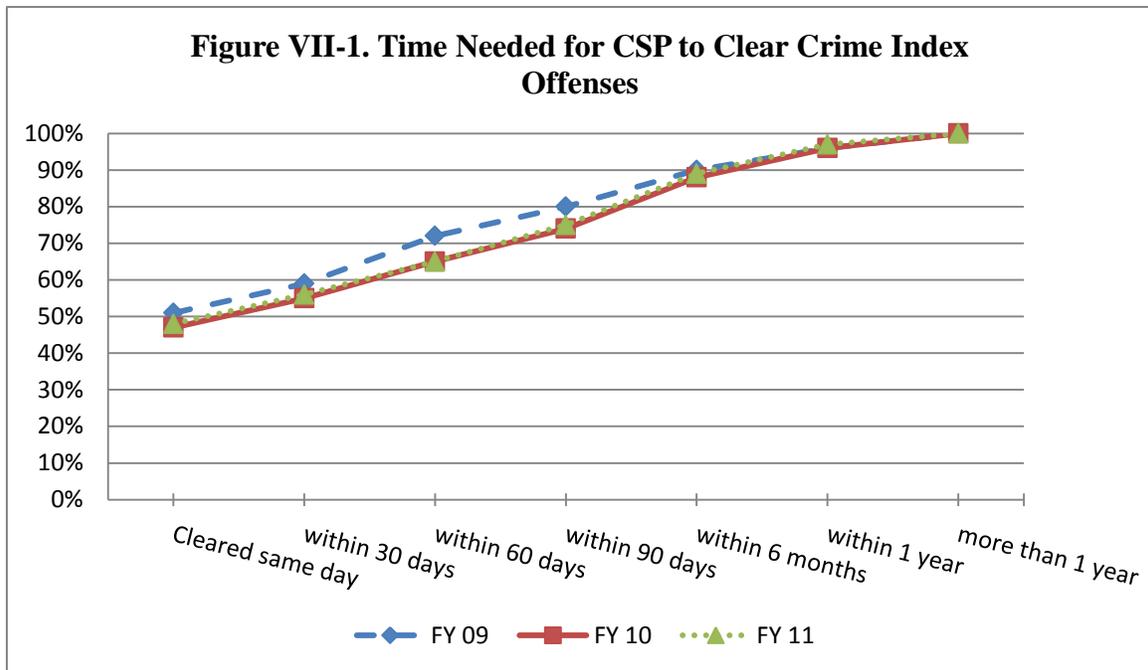
Time Needed to Clear Crimes. In addition to clearance status, CSP also maintains information on the time it takes to clear cases. Information on the time needed to clear crimes was examined for Crime Index offenses, other serious offenses, and Group B offenses.

Time Needed to Clear Crime Index Offenses

Table VII-5 shows that Crime Index offenses were cleared in a significantly shorter period of time in FY 09 compared with FY 10 and FY 11. Figure VII-1 shows this difference using a cumulative graph.

Table VII-5. Time Taken to Clear Crime Index Cases						
Cleared:	FY 09		FY 10		FY 11	
	Percent	Cum. Percent	Percent	Cum. Percent	Percent	Cum. Percent
Same day	51%		47%		48%	
Within 30 days	8%	59%	8%	55%	8%	56%
1-2 months	13%	72%	10%	65%	9%	65%
2-3 months	8%	80%	9%	74%	10%	75%
3-6 months	10%	90%	14%	88%	14%	89%
6-12 months	6%	96%	8%	96%	8%	97%
More than 1 year	4%	100%	4%	100%	2%	99% ^a

^aMay not total to 100% due to rounding.
Source: Uniform Crime Reporting data (UCR) collected by CSP



Time Needed to Clear Other Serious Offenses

There does not appear to be a difference in time taken to clear other serious crime cases for FY 09 through FY 11 (Table VII-6).

Cleared:	FY 09		FY 10		FY 11	
	Percent	Cum. Percent	Percent	Cum. Percent	Percent	Cum. Percent
Same day	78%		77%		79%	
Within 30 days	9%	87%	10%	87%	9%	88%
1-2 months	4%	91%	4%	91%	3%	91%
2-3 months	2%	93%	3%	94%	3%	94%
3-6 months	3%	96%	4%	98%	2%	97%
6-12 months	2%	98%	2%	100%	1%	99%
More than 1 year	1%	99%	1%	101%		100%

^aMay not total to 100% due to rounding.
Source: Uniform Crime Reporting data (UCR) collected by CSP

Time Needed to Clear Group B Offenses

A similar analysis was conducted for Group B offenses. In this instance, there was a decrease in time needed to solve such offenses (Table VII-7). The Group B offenses were cleared in shorter periods of time with each successive year. Conversely, fewer cases that require more time to clear, such as more than 1 year, are less likely to occur in FY 10 and FY 11.

Table VII-7. Time Taken to Clear Group B Offenses						
Cleared:	FY 09		FY 10		FY 11	
	Percent	Cum. Percent	Percent	Cum. Percent	Percent	Cum. Percent
Same day	71%		79%		82%	
Within 30 days	6%	77%	8%	87%	7%	89%
1-2 months	3%	80%	3%	90%	3%	92%
2-3 months	2%	82%	2%	92%	2%	94%
3-6 months	4%	86%	4%	96%	3%	97%
6-12 months	5%	91%	2%	98%	3%	100%
More than 1 year	8%	99% ^a	2%	100%	1%	101% ^a

^aMay not total to 100% due to rounding.
Source: Uniform Crime Reporting data (UCR) collected by CSP

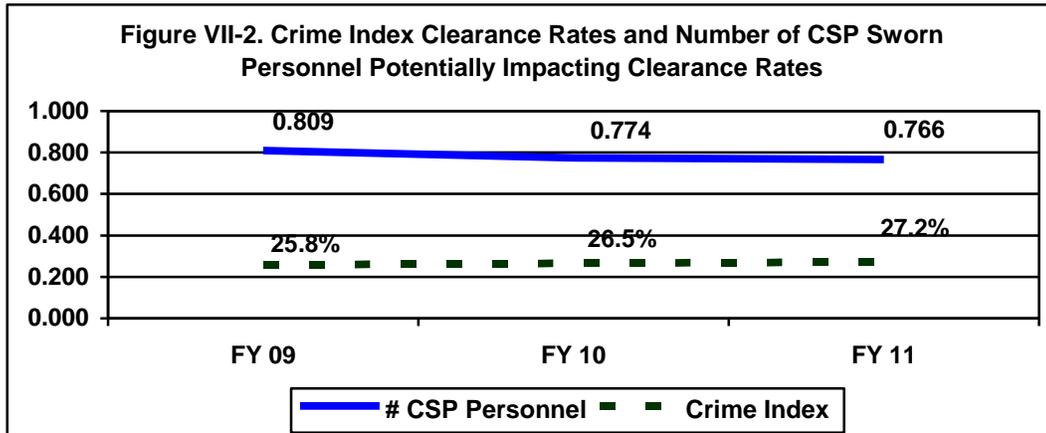
Relationship Between Crime Clearance Rates and State Police Staffing Levels

In addition to the efforts of active patrol troopers and resident state troopers in each Troop, there are other units within CSP that work to solve crimes, such as the Major Crimes Unit, the Bureau of Criminal Investigation (BCI), the Emergency Services Unit (ESU), and Computer Crimes. Table VII-8 shows the number of sworn staff in these units for FY 09 through FY 11. Note these figures include the average monthly number of active sworn personnel, excluding those on light duty. There was a five percent decrease from FY 09 to FY 12 in total number of staff potentially impacting crime clearance rates.

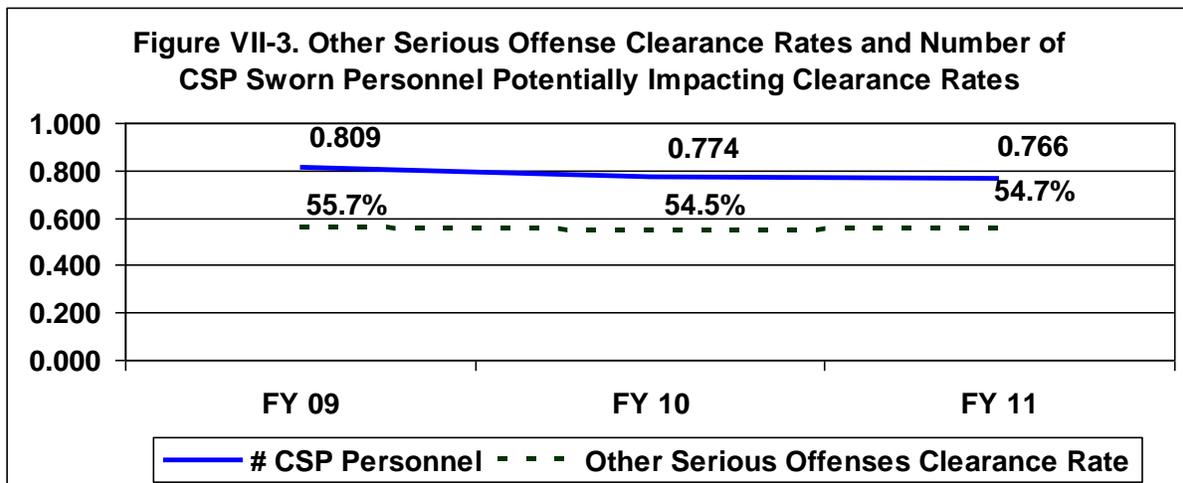
Table VII-8. Average Monthly Number of Sworn Staff¹			
Unit	FY 09	FY 10	FY 11
BCI Total	80.8	52.6	57.7
BCI-Auto theft	13.6	8.7	6.6
BCI-SOCITF	6.9	5.8	5.4
BCI-SUVCCTF	9.1	2.8	2.2
BCI-Firearms Task Force	8.5	4.4	3.4
BCI-Narcotics	29.7	22.6	26.1
BCI-Fugitive Task Force	2.9	3.0	0
BCI-Central Criminal Intelligence Unit	3.7	1.1	2.9
BCI-Other	6.4	4.2	11.1
Emergency Services Unit	19.1	17.4	19.4
Computer Crimes	10.7	11.9	10.6
Major Crimes	87.9	91.3	86.1
Specialized Units Subtotal	198.5	173.2	173.8
Patrol and Resident State Troopers	576	570	559
Casino Unit	34.6	30.5	32.7
Total	809	774	766

¹Excludes personnel on light duty.
Source: Source: CORE-CT time and attendance data.

Crime index clearance rates and staffing levels. The total number of staff potentially impacting Crime Index clearance percent was converted to rates per 1,000 (for purposes of comparing to Crime Index Clearance rates). Figure VII-2 shows the increase in Crime Index clearance rates at the same time that the number of CSP sworn personnel potentially impacting clearance rates decreased. The decreasing staffing levels did not appear to have had an adverse impact on Crime Index clearance rates.



Other Serious Offense Clearance Rates and Staffing Levels. There may be a modest association between clearance rates for other serious offenses and staffing levels (Figure VII-3).



Relationship Between Time Needed to Clear Crimes and CSP Staffing Levels

In addition to examining the relationship between staffing levels and clearance rates, the potential association between time to clear crimes and staffing levels was also analyzed.

Crime index clearance time and staffing levels. As described earlier, there was a five percent decline in staffing levels from FY 09 to FY 10 (from 809 to 766) of the primary CSP

staff used to investigate and solve crimes, with relatively little change between FY 10 and FY 11 (774 in FY 10 to 766 in FY 11). This coincides with the increased time needed to clear Crime Index offenses. For example, 72 percent of cleared cases that occurred for Crime Index offenses were cleared within two months in FY 09. In contrast, 65 percent of cleared cases had been cleared within two months for FY 10 and FY 11 (Table VII-9). There may be a trade-off between time to clear Crime Index offenses and staffing levels.

Table VII-9. Staffing Levels and Clearance Time for Crime Index Offenses				
	FY 09	FY 10	FY 11	FY 09 to FY 11 Change
Staffing level	809	774	766	 5%
Crime Index Offenses Cleared	1,314	1,340	1,300	 1%
% Cleared within 60 Days	72%	65%	65%	 10%

Other serious offense clearance time and staffing levels. A similar analysis was undertaken for other serious crimes (Table VII-10). While there was no change in the percent cleared within 60 days, there was, however, a 16 percent decrease in the number of—but not the percent of—other serious offenses cleared.

Table VII-10. Staffing Levels and Clearance Time for Other Serious Offenses				
	FY 09	FY 10	FY 11	FY 09 to FY 11 Change
Staffing level	809	774	766	 5%
Other Serious Offenses Cleared	4,675	4,077	3,912	 16%
% Cleared within 60 Days	91%	91%	91%	No change

Group B offense clearance time and staffing levels. Similar to the analyses undertaken for Crime Index and other serious crimes, associations between staffing levels and Group B offense clearance times were also examined (Table VII-11). There was both an increase in the number of Group B crimes cleared, and the percent cleared within 60 days.

Table VII-11. Staffing Levels and Clearance Time for Group B Offenses				
	FY 09	FY 10	FY 11	FY 09 to FY 11 Change
Staffing level	809	774	766	 5%
Group B Offenses Cleared	5,219	5,849	5,790	 11%
% Cleared within 60 Days	80%	90%	92%	 15%

Summary

Combining information on different levels of crimes, clearance rates, clearance times, and staffing levels, *there is no overwhelming evidence that crime clearance rates were significantly impacted by the decrease in staffing levels.*

With regard to clearance times, there is evidence to suggest that staffing level decreases were associated with lengthier times to clear Crime Index offense cases. However, the time to clear Group B offenses appears to have decreased, despite the 11 percent increase in such offenses. Given that one type of crime appeared to have taken longer to clear in FY 11 compared with FY 09 (i.e., the Crime Index offenses) and another type of crime appeared to have taken less time to clear in FY 11 compared with FY 09 (i.e., Group B offenses), there is no overwhelming evidence that crime clearance times have been significantly impacted by the decrease in staffing levels.

In an interview with Major Crimes, PRI staff was told that the techniques used to investigate and solve crimes have become more sophisticated, resulting in more time spent on individual cases. Also, there is a team approach to make investigations as comprehensive as possible so that the evidence is solid and will hold up in court, if necessary. Thus, a change in how the most serious crimes are investigated may be reflected in the lengthier time to clear such cases.

It also may be that staffing level is just one of many factors that influence crime rates. Some of the analyses conducted in this section suggest, however, that more time is needed to clear the most serious of offenses—those in the Crime Index. Since CSP has no standards by which to assess these statistics, a longer time to solve certain crimes is not a factor in determining an adequate staffing level. Should CSP set clearance time goals or standards, then such statistics could be monitored to alert CSP to potential staffing level shortfalls.

The Atlanta Police Department, for example, produces statements of accomplishments as part of its formal budget submission, such as department clearance rate and comparison with the national average. CSP may also choose to compare CSP clearance rates with the national averages. A reduction in CSP clearance rates for Crime Index offenses that fell below the national averages might be another indication that staffing levels should be examined.

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Highway Safety

Theory being tested:

As staffing levels **decreased**, highway safety **decreased**

Key Findings:

- As staffing levels declined, there was not a corresponding increase in traffic accidents.
 - The total number of accidents on roadways under CSP jurisdiction decreased eight percent from FYs 09-12, and the number of accidents with injuries declined four percent, yet there was no statistically significant correlation between state police sworn personnel staffing levels and the number of accidents or the number of accidents with injury.
- Despite the issuance of more or less tickets by CSP, the percent of accidents with injuries increased from FY 09 through FY 12. Thus, there does not appear to be a relationship between the issuance of tickets and accidents with injuries.
 - There was no statistically significant relationship between the number of tickets issued and the total number of active patrol and resident state troopers and Traffic Services Unit active sworn personnel.
- There is no association between fatal accidents and number of active troopers for FYs 2009-12, nor was there a relationship between the issuance of tickets and the number of fatal accidents for the same time period.
- In FYs 09-12, the trend in the number of DWIs is quite similar to the trend in the number of sworn personnel.
 - While it is conceivable that the number of individuals driving while intoxicated has coincidentally decreased or remained constant during the same times that CSP sworn personnel decreased or remained constant, another interpretation of this data could be that fewer CSP are available to apprehend intoxicated drivers.
 - Overall, there was no statistically significant association between the number of DWIs and accidents with injuries in the troops. Patterns were found in several Troops, however, which may prove useful to CSP in future strategies in this area.

Conclusion:

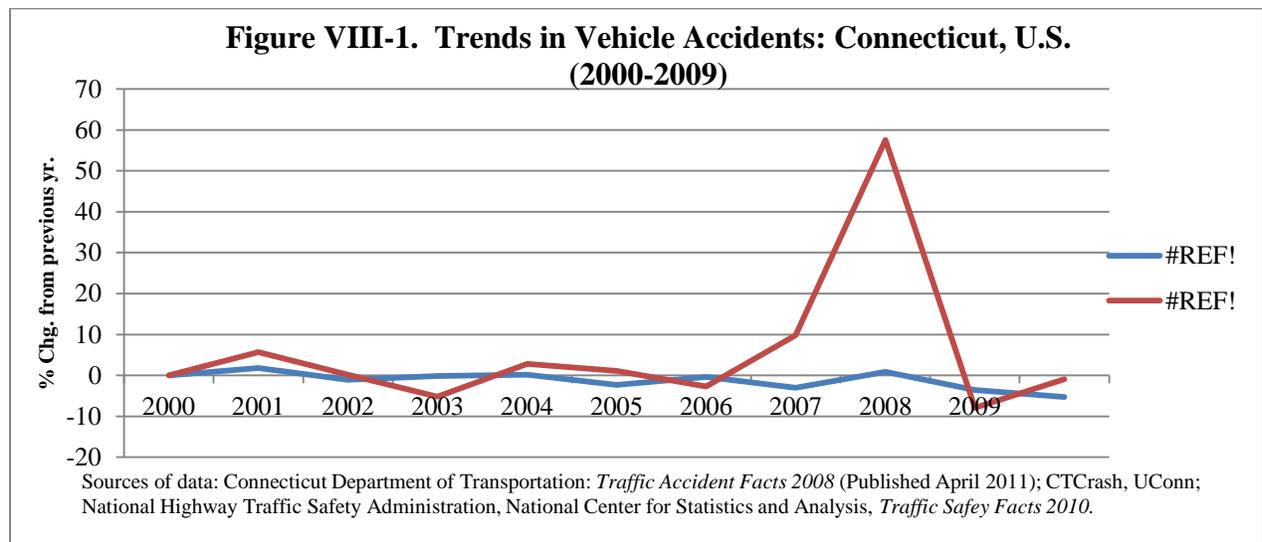
Analyses indicate that decreased staffing levels were not associated with corresponding increases in most highway safety-related incidents. For example, as staffing levels declined, there was not a corresponding increase in accidents. However, a decrease in the number of DWI arrests is quite similar to the trend in the number of sworn personnel, indicating a positive trend.

A core function of the Connecticut State Police is to ensure the state’s highways and secondary roads under CSP jurisdiction are safe. Although safety is a relative term, several factors attributed to roadways can be examined to help determine safety. Moreover, the number of traffic-related incidents troops are respond to, and the servery of such incidents, namely accidents involving injuries or fatalities, are key variables affecting the overall workload of Connecticut’s state police and thus impact staffing requirements.⁶⁹

Committee staff examined the “actual call type” variable within CAD for fiscal years 2009 through 2012 to analyze seven components of roadway incidents affecting safety from a statewide perspective and at the individual troop level. Specifically, the analysis focused on total accidents, accidents involving injury, driving while intoxicated, total traffic stops, commercial traffic stops, tickets issued, and accident fatalities. Additional information examining the correlation between these seven roadway safety components and aggregate staffing is presented.

State and National Vehicle Accident Trends

Figure VIII-1 shows the annual percent increase or decrease in roadway accidents by year for 2000-2009 both nationally and specific to Connecticut. Accidents may include property damage only, accidents with injury, and fatal accidents. One caveat about the figure is the information source used for the national data (National Highway Traffic Safety Administration) notes the data are estimates and year-to-year comparisons should be made with caution. That said, the figure illustrates national and Connecticut-specific accident data.



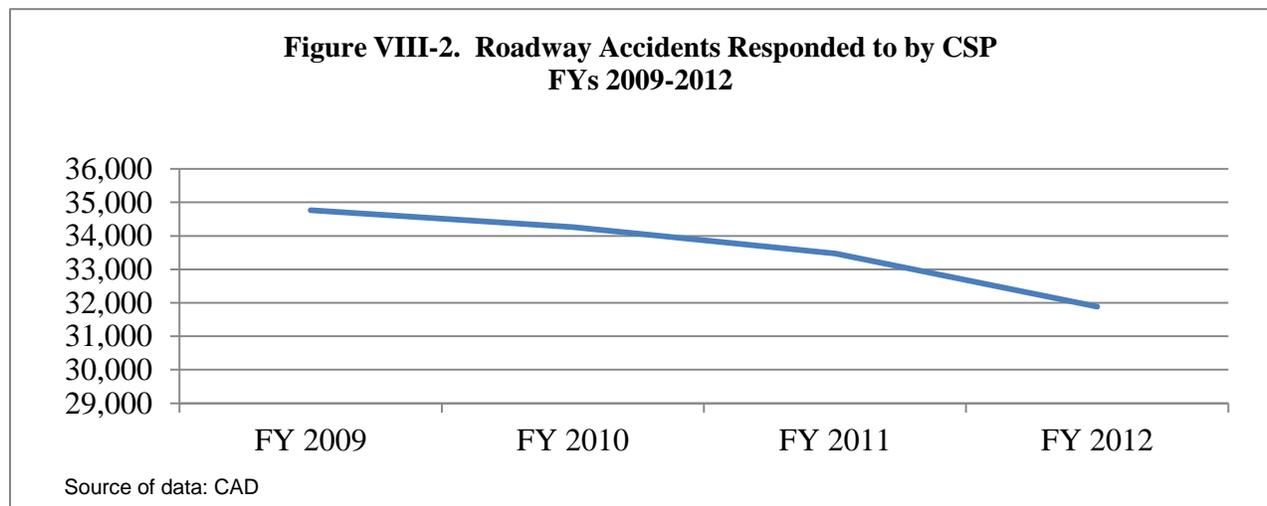
Overall, a comparison of the percent increase/decrease in the number of roadway accidents for Connecticut with national figures shows a mostly similar trend for the time period analyzed. The one obvious difference is the sharp increase in 2007-08 for Connecticut

⁶⁹ An accident, as defined in the CSP Administration/Operations Manual, is an un-stabilized situation, which includes at least one harmful event. The A/O Manual further notes definitions used in the manual to describe accidents are derived from the *Manual on Classification of Motor Vehicle Traffic Accidents, 6th Ed.*, National Safety Council.

accidents-the DOT data source used for the analysis indicates that property damage-only accidents that occurred on locally maintained roadways were included in 2007, which helps account for the sharp percentage increase. Keep in mind the graphs shows the the percent change in the number of accidents by year, not the actual number of accidents.

Total Roadway Accidents: CSP Jurisdiction

Figure VIII-2 shows the aggregate number of accidents occurring on Connecticut roadways within the purview of the state police and based on the actual call for service in the CSP computer aided dispatch system (i.e., CAD). Since FY 2009, there has been a steady yearly decline in the total number of accidents. Overall, there was an 8.3 percent drop during the four-year period analyzed, from 34,761 in FY 09, to 31,888 in FY 12. It should be noted that accident information occurring on local roads in towns patrolled by a resident state trooper(s) is included in the analysis because the troopers use state-issued police vehicles equipped with computers connected to CAD which collects incident information. Also included in the analylsis are the accidents responded to by sworn personnel located in the Traffic Services Unit and headquarters (during General Patrol) and instances where committee staff determined more than one troop responded.⁷⁰



An examination of the number of accidents occurring in individual years shows there was a 1.4 percent drop from FY 09 to FY 10 (34,761 to 34,262 accidents). Between FYs 2010-11, the number of accidents dropped 2.3 percent, from 34,262 to 33,470. The sharpest decline in the four-year period analyzed occurred most recently. The percent of roadway accidents between FY 11 and FY 12 decreased almost 5 percent, from 33,470 accidents to 31,888.

Accidents by troop. The number of accidents by troop varies according to the overall make-up of the troops. As previously discussed, troops have individual characteristics and geographic areas that affect the number of accidents they respond to. For example, Troop G, considered a “highway troop,” has jurisdiction over Interstate 95 from the New York boarder to

⁷⁰ The Traffic Services Unit is a specialized unit with troopers assigned solely to statewide highway safety patrols and staffing the various commercial vehicle weigh stations throughout the state, including roving weigh scales.

Branford, arguably one of the busiest stretches of highway in the state based on overall traffic volume. At the same time, Troop B, considered a “country troop” with jurisdiction in the Northwest corner of the state, patrols a mostly rural area with limited high-volume major highways. Given the geographic distinctions and patrol areas across troops, some are more likely to experience a greater number of calls for service involving vehicle accidents.

Table VIII-1 shows the total, and average, number of accidents by troop for fiscal years 2009-12. Troops G and H - the troops covering large portions of major interstate highways in two of the state’s most densely populated cities, Bridgeport and Hartford, averaged the highest number of accidents for the period examined: Troop G averaged just under 7,400 accidents and Troop H averaged just over 4,700 accidents. Conversely, Troops B and D averaged the lowest number of accidents over the four years, 608 and 1,064 respectively (Note: Troop W only patrolled Bradley International Airport prior to its merger with Troop H in March 2012.)

Troop	FY 09	FY 10	FY 11	FY 12	Average
G	7,164	7,036	7,543	7,723	7,367
H	4,373	4,707	4,934	4,922	4,734
Other	6,297	5,290	3,725	2,507	4,455
I	2,740	3,182	3,402	3,379	3,176
A	2,771	3,403	3,156	3,302	3,158
E	2,752	2,488	2,670	2,576	2,622
C	2,275	1,874	1,693	1,537	1,845
F	1,692	1,549	1,581	1,697	1,630
K	1,348	1,341	1,459	1,356	1,376
L	1,305	1,499	1,422	1,149	1,344
D	959	1,102	1,143	1,050	1,064
B	619	602	566	643	608
W	466	189	176	47	220
Totals	34,761	34,262	33,470	31,888	33,595

Note: “Other” includes accidents responded to by the Traffic Services Unit, sworn personnel stationed at headquarters, and instances where multiple troops responded. Also, Troop W merged with Troop H in March 2012.
Source of data: CAD

The percent of accidents with injuries by troop for FY 12 is provided in Table VIII-2. Of the current 11 troops, Troop G responded to the largest percentage of accidents (24.2 percent), while Troop B handled the lowest percentage (2 percent). This is not an unusual result given the characteristics of each troop.

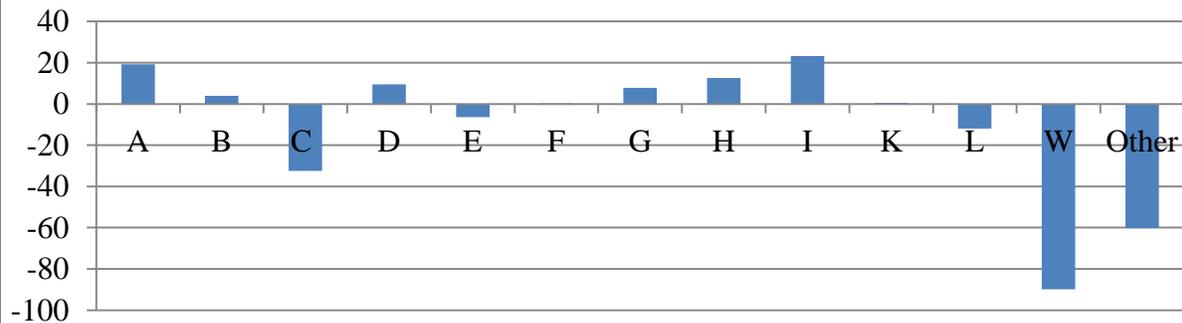
Table VIII-2. Percent of Accidents Responded to by Troop: FY 12

Troop	Percent Accidents
G	24.2
H	15.4
I	10.6
A	10.4
E	8.1
Other*	7.9
F	5.3
C	4.8
K	4.3
L	3.6
D	3.3
B	2.0
W	.01

*Other is combination of Traffic Services Unit, headquarters, and instances where PRI staff determined in CAD that more than one troop responded to an accident.
Source of data: CAD

Percent change by troop. In addition to the total number of accidents by troop, the percent change in total accidents by troop for FYs 09-12 was examined. Figure VIII-3 shows somewhat mixed results. Of the 11 troops (excluding Troop W), Troop I experienced the largest percent increase in accidents (23.3), while Troop C showed the largest percent decrease (-32.4). As shown, there were negligible changes for Troops F and K. In addition, the accidents responded to by TSU, sworn personnel at CSP headquarters, and cases involving multiple troop responses declined by roughly 60 percent. Again, the reason for the steep decline in Troop W is due to its merger with Troop H in early 2012.

Figure VIII-3. Total Accidents by Troop: Percent Change FYs 2009-12

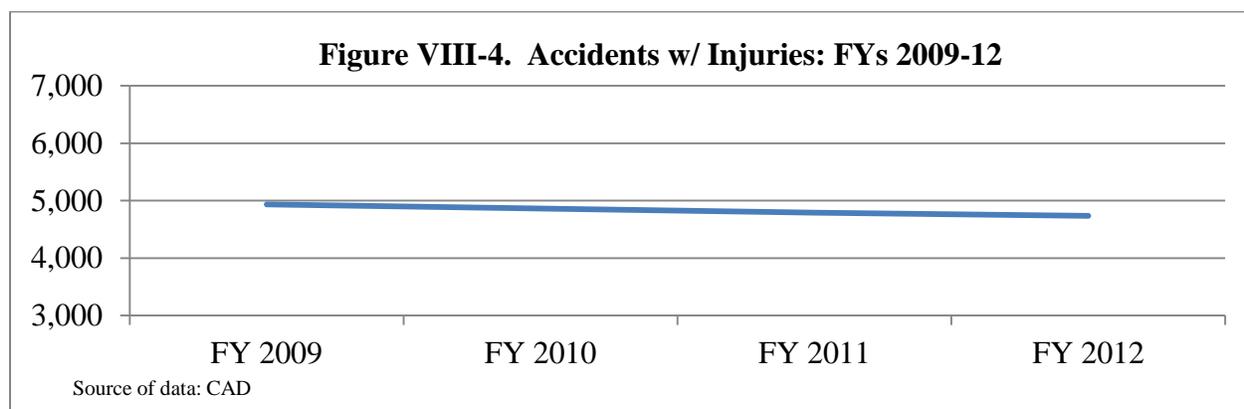


Source of data: CSP/CAD

Accidents with Injury

In CAD, a call for service variable relating to accidents is “accidents involving injury.” This is a somewhat wide-ranging call category as far as the types of accident and injury involved; injuries may be minor or serious. At the same time, however, any positive or negative trend in accidents involving injuries could be indicative of overall roadway safety, including efforts attributed to the state police.

Figure VIII-4 shows there has been a steady decline in accidents with injuries responded to by the state police for the four-year period reviewed. Overall, such accidents dropped 4.1 percent, from 4,937 in FY 09, to 4,734 in FY 12, a decrease at approximately half the rate of the overall number accidents.



Contrary to the results presented above for total accidents, there was no appreciable percent decline in any given year for accidents with injuries: between FYs 2009-10, there was a 1.4 percent drop; a 1.6 percent decline between FYs 10-11; and 1.2 percent drop from FY 11 to FY 12. In addition, accidents with injuries accounted for just under 15 percent of all accidents responded to by CSP in FY 2012.

A comparison of the annual percent change in accidents with injury was made for Connecticut and national data. From 2000 to 2010, the percent of accidents with injury nationwide dropped 26.7 percent, from 2,070,000 to 1,517,000.⁷¹ For the same time period, accidents with injuries in Connecticut decreased 25.6 percent, comparable to the national trend. In 2000, there were 34,447 accidents with injury, which dropped to 25,610 in 2010.⁷² (Keep in mind the Connecticut data includes all accidents with injuries statewide, beyond those occurring within areas solely under CSP jurisdiction.)

Accidents with injury by troop. The total number of accidents with injuries by troop fiscal years 2009 through 2012 is provided in Table VIII-3. Comparable to the annual total number of accidents by troop not including Troop W stationed at Bradley International Airport,

⁷¹ National Highway Traffic Safety Administration, *Traffic Safety Facts 2010*.

⁷² CT Department of Transportation, *Connecticut Traffic Accident Facts, 2008*, published April 2011; Connecticut Crash Data Repository, University of Connecticut.

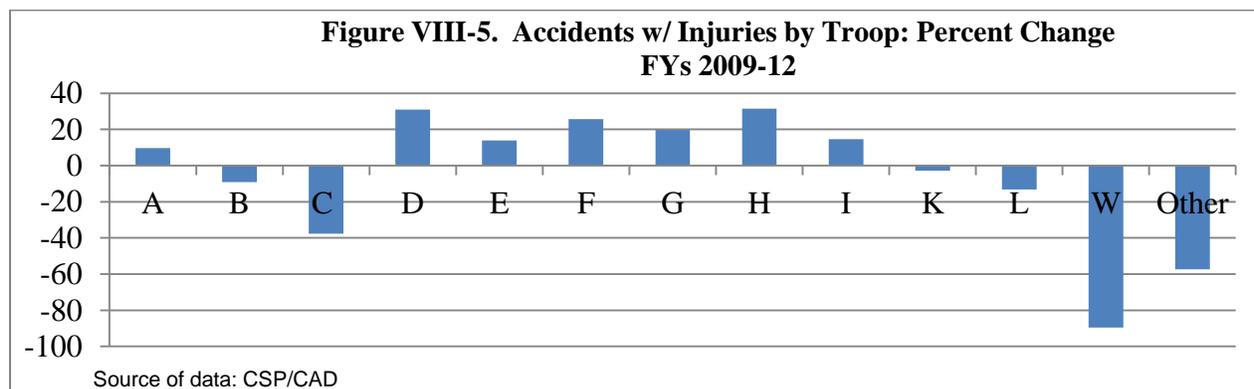
Troop G averaged the most annual accidents with injury (1,104), while Troop B averaged the fewest such accidents (102).

The annual average number of accidents with injury also steadily declined from FY 2009 through FY 2012. The total number of such accidents in FY 09 was 4,937, followed by 4,865 in FY 10, 4,789 in FY 11, and 4,734 in FY 12 – or a yearly average of 4,832. Over the four-year span, there was a 2.1 percent decrease in the number of accidents with injury responded to by the Connecticut State Police.

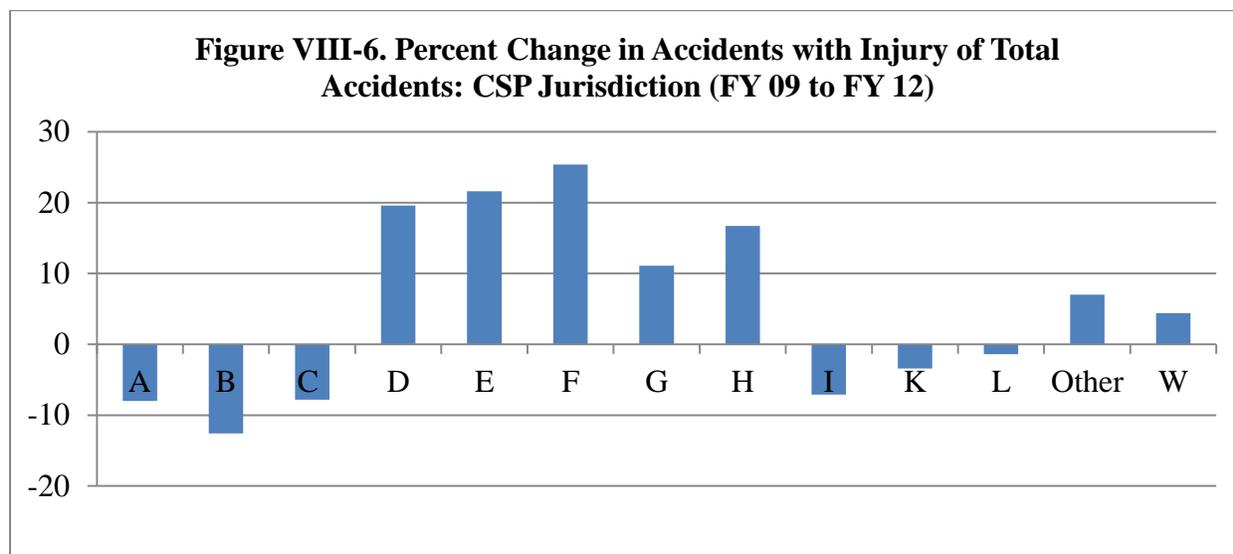
Troop	FY 09	FY 10	FY 11	FY 12	Average
G	952	948	1,014	1,140	1,014
Other	988	843	571	421	706
H	596	620	682	783	670
I	335	372	424	384	379
A	343	402	391	376	378
E	339	325	329	386	345
F	276	280	378	347	320
C	363	338	337	226	316
K	211	226	216	205	215
L	212	236	218	184	213
D	126	153	123	165	142
B	120	97	83	109	102
W	76	25	23	8	33
Annual Totals	4,937	4,865	4,789	4,734	4,832

Note: "Other" includes accidents responded to by the Traffic Services Unit, sworn personnel stationed at headquarters, and instances where multiple troops responded. Also, Troop W merged with Troop H in March 2012.
Source of data: CAD

Percent change by troop. The annual percent change in the total accidents with injuries was examined by troop. Figure VIII-5 shows mixed results across the troops, with some troops experiencing lower or higher percent changes. Of the current 11 troops, Troops D and H experienced the largest percent increase in accidents with injuries, at roughly 31 percent each. Excluding Troop W and the category "other," Troop C showed the largest decline, at almost 38 percent.



Accidents with injury of total accidents. CAD data were examined to determine the percent of accidents with injuries of the total number of accidents. This analysis was done on an individual troop level, as shown in Figure VIII-6. Overall, there was a 4.5 percent increase in the number of accidents with injuries as a percent of all accidents between FY 09 and FY 12. At the troop level, Troop F experienced a 25.4 percent increase in its accidents with injuries of total accidents, followed by Troop E (21.6 percent) and Troop D (19.6 percent). In Troop B, there was a 12.6 percent drop in accidents with injuries of total accidents, while Troop A had an 8 percent decline followed by Troop I, with a 7.1 percent drop.

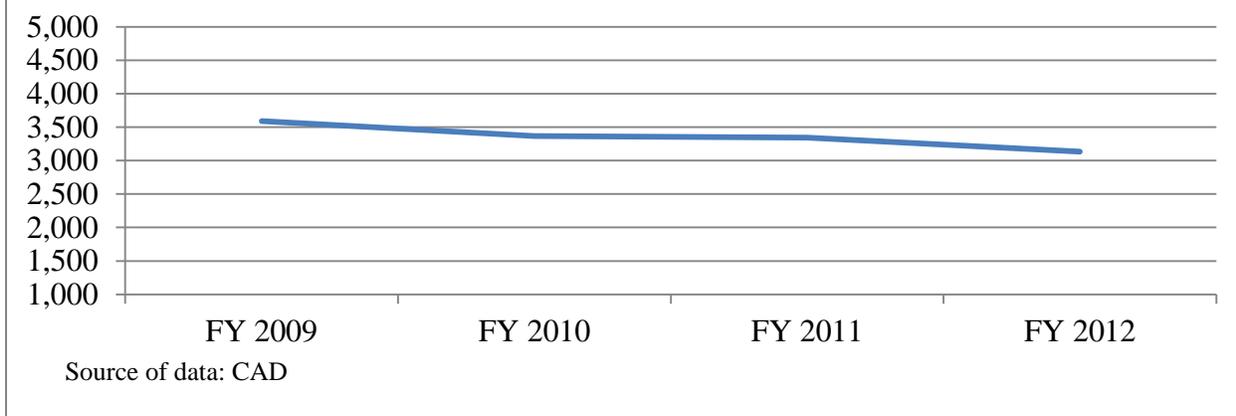


Intoxicated Driving

Another factor examined related to roadway safety was the actual calls for service involving motorists driving while intoxicated (DWI). Obviously, the potential for serious injury or fatality increases when motorists drive impaired. Key state police proactive efforts to curb DWI accidents include mobile breath analysis and criminal processing capabilities through the Traffic Services Unit, individual troops setting up DWI checkpoints or working with municipalities on such efforts, along with the reactive measure of responding to calls for service involving erratic driving which may lead officers to finding intoxicated motorists. In addition, a common theme found during committee staff's troop visits and meetings with state police personnel is that more proactive measures on the part of CSP would help lessen motorists driving impaired, as well as the number of DWI-related accidents, yet current staffing levels hinder such efforts.

That said, the trend in the number of actual service call types involving DWIs responded to by the state police, similar to other trends involving accidents presented above, decreased from FY 2009 through FY 2012. Figure VIII-7 shows such service calls dropped from 3,590 in FY 09, to 3,133 in FY 12 – almost a 13 percent decline. In interviews with CSP personnel, the belief is this decrease reflects fewer resources expended on DWI arrests rather than an actual decline in intoxicated drivers.

**Figure VIII-7. DWI Actual Calls for Service
FYs 2009-12**



DWIs by troop. The yearly DWI incidents by troop for fiscal years 2009 through 2012 are provided in Table VIII-4. Troop E averaged the most DWI incidents a year (549), while Troop B averaged the fewest (120), again excluding Troop W from the analysis. The fact that Troop E exceeded Troop G in a traffic incident category is of note, because Troop G is the largest of the highway troops and responds to the most roadway incident calls for service. Regardless, Troop E averaged over twice as many DWI incidents as Troop G for time period examined. Also of note, is the Troop E patrol area includes the state’s two casinos, which may affect the number of calls involving DWIs, although this is not an area of analysis examined by committee staff.

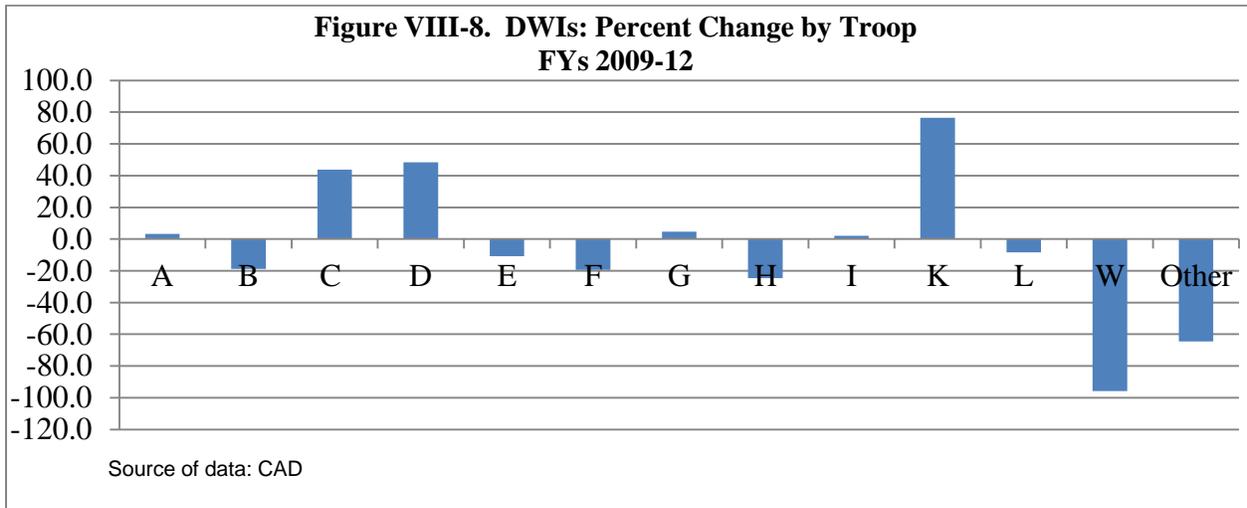
Table VIII-4. DWIs by Troop: FYs 2009-12

Troop	FY 09	FY 10	FY 11	FY 12	Average
Other*	874	596	533	310	578
E	541	559	611	483	549
C	288	293	358	414	338
H	277	340	253	209	270
A	267	254	264	276	265
G	252	227	263	264	252
F	262	226	229	211	232
L	225	231	208	206	218
K	166	194	196	293	212
D	149	156	171	221	174
I	142	145	126	145	140
B	123	133	126	100	120
W	24	13	5	1	11
Annual Totals	3,590	3,367	3,343	3,133	3,358

* “Other” includes accidents responded to by the Traffic Services Unit, sworn personnel stationed at headquarters, and instances where multiple troops responded.

Source of data: CAD

Percent change by troop. The annual percent change in DWIs by troop was reviewed. Figure VIII-8 shows of the 11 current troops, Troop K, a mostly rural troop, had almost a 77 percent increase in DWI actual calls for service for FYs 09-12, the largest increase across all the troops. Conversely, actual service calls involving DWIs in Troop H, a highway troop, decreased almost 25 percent.

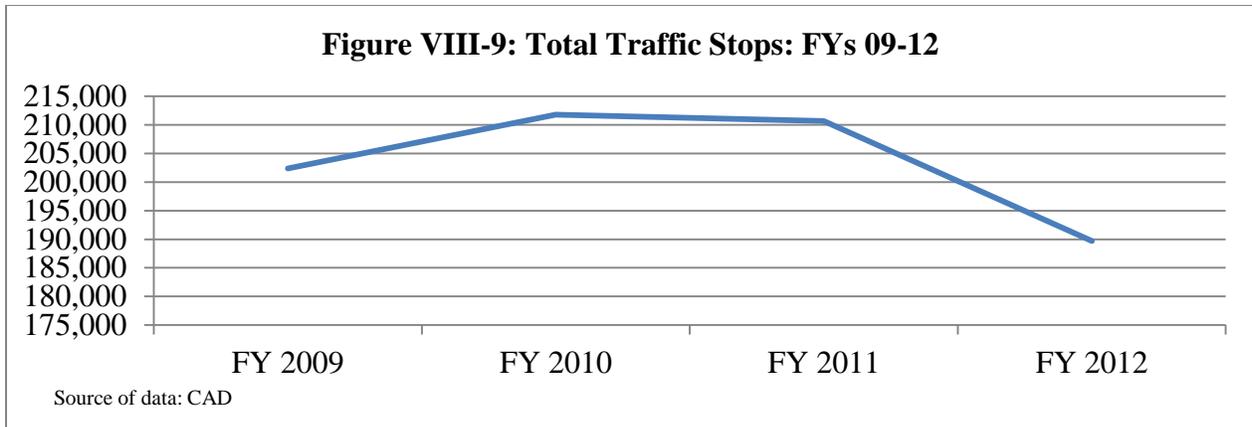


Traffic Stops

Traffic stops conducted by law enforcement help serve two key purposes: 1) eliminate the original offense a motorist was stopped for; and 2) increase the possibility of police finding more severe offenses. Committee staff heard as part of its troop visits that officers who conduct traffic stops oftentimes find proof of additional crimes committed by drivers. For example, a vehicle may be stopped for a routine traffic violation, yet the trooper may end up finding illegal drugs as part of the original stop. Obviously every traffic stop has the potential for troopers to uncover additional, and possibly more severe, offenses that could lead to risk of roadway injury or even death due to such offenses.

Virtually all traffic stops are self-initiated (i.e., self-dispatched) events by troopers. Traffic stops can be for a variety of reasons and may result in written warnings, tickets, or even arrest by troopers. When making self-initiated stops, troopers utilize CAD to ensure their troop dispatch center is aware of the critical information regarding the stop, including trooper location and motorist vehicle license number/identification. Information pertaining to self-initiated traffic stops is entered into the CAD system. As such, traffic stops have a specific code in CAD, which committee staff used in its analysis below.

Figure VIII-9 highlights the overall number of traffic stops for FYs 2009 through 2012. The number of stops increased just under 4.7 percent, from 202,389 in FY 09, to 211,787 in FY 10. Since FY 10, the total number of traffic stops decreased to the four-year low of 189,720 in FY 12. Overall, there was a 6.2 percent drop in the number of traffic stops from FY 09 through FY 12.



Traffic stops by troop. The yearly number of traffic stops by troop for fiscal years 2009 through 2012 is shown in Table VIII-5. Troop F averaged the most number of stops for the four-year period, with just over 20,600 a year. Troop B, on the other hand, averaged 6,048 stops annually, the lowest average among the 11 current troops. The Traffic Services Unit, which provides proactive traffic enforcement as one of its core functions, averaged just over 17,300 traffic stops per year.

Troop	FY 09	FY 10	FY 11	FY 12	Average
F	20,165	22,926	20,353	19,075	20,630
G	20,461	19,417	20,735	19,036	19,912
C	18,043	19,655	19,344	17,281	18,581
H	15,043	21,229	18,870	14,273	17,354
TSU*	19,051	16,629	19,287	14,333	17,325
E	17,647	17,225	17,859	15,980	17,178
A	15,343	16,968	17,712	17,464	16,872
K	12,643	13,437	18,089	20,757	16,232
L	12,255	15,198	13,947	12,123	13,381
I	14,198	13,733	12,007	12,075	13,003
D	10,180	10,336	12,471	15,420	12,102
B	6,382	6,479	5,883	5,448	6,048
W	3,228	1,772	1,292	477	1,692
Annual Totals	202,389	211,787	210,361	189,720	203,564

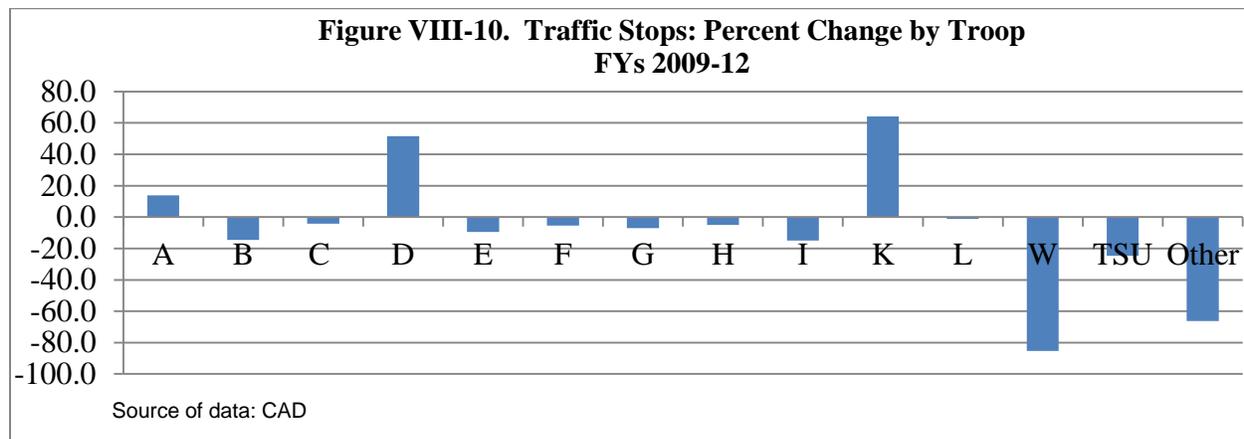
*The Traffic Services Unit is a specialized unit within the state police. A primary responsibility of the unit is to provide proactive traffic control on a statewide basis. The unit has troopers solely dedicated to highway speed enforcement, as well as commercial vehicle, DWI, and accident reconstruction components.

** "Other" includes accidents responded to by sworn personnel stationed at headquarters and instances where committee staff determined through CAD that multiple troops responded.

Source of data: CAD

Percent change by troop. Figure VIII-10 shows the annual percent change in traffic stops by troop. Of the 11 current troops, along with the Traffic Services Unit, the largest percent increase in traffic stops from FY 2009 through FY 2012 occurred in Troop K (64.2 percent).

Excluding “other,” TSU experienced the largest decrease in traffic stops, just under 25 percent. It should be mentioned that sworn officer staffing levels in the Traffic Services Unit have decreased by half since FY 09.



Commercial Traffic

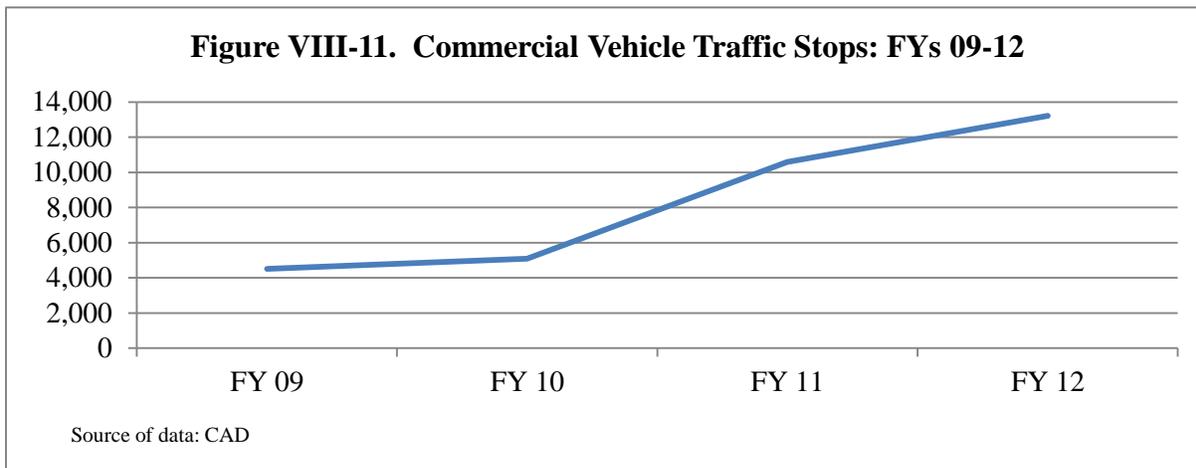
Commercial traffic (i.e., trucks, motor coaches, school buses, semi-tractor trailers) in Connecticut is a regulated industry. Vehicle weight, driver records, cargo type, speed, and maintenance are examples of the safety areas regulated for commercial vehicles. The state police, along with the motor vehicles department, are charged with ensuring highway safety through inspections and safety checks of inter- and intrastate commercial vehicles using Connecticut’s roadways.

There are 62 state police troopers across all the barracks who serve the dual role of trooper and commercial vehicle inspector (TSU has an additional 15 troopers solely dedicated to commercial vehicle inspections). The troopers are specifically trained in accordance with the federal Motor Carrier Safety Assistance Program’s commercial vehicle inspection requirements.⁷³ The program’s purpose is to ensure a uniform inspection system with the goal of improved commercial vehicle safety. Training provided through the program prepares law enforcement personnel on how to conduct multi-level commercial vehicle inspections, referred to as North American Standard Inspections (NASI), of which there are five levels.

Figure VIII-11 provides the overall trend in commercial vehicle traffic stops across all CSP troops for FYs 2009 through 2012. The number of stops increased almost three-fold over the four-year period, from 4,520 stops in FY 09, to 13,210 in FY 12. Committee staff believes the main reason for this rise is the state’s response to increased commercial vehicle accidents beginning in FY 11. After several major truck accidents on state highways, notably in July 2010,

⁷³ The Federal Motor Carrier Safety Administration, within the US Department of Transportation, has specific regulations for commercial vehicle safety. The administration conducts the training and issues certification to inspectors within law enforcement. Personnel completing and maintaining the training are considered NASI certified (National American Standard Inspection). See: <http://www.fmcsa.dot.gov/NTC/Course/Detail/28> for additional details.

more focused efforts on enforcing commercial vehicle safety were implemented, resulting in more traffic stops.



Traffic stops by troop. Table VIII-6 shows the yearly number, and average, of commercial traffic stops by troop for FYs 2009 through 2012. The table also shows information for the Traffic Services Unit and “other.” As expected, TSU and Troop G had the highest yearly averages of commercial vehicle stops among all the troops. TSU focuses a lot of its activity on commercial vehicle safety enforcement and Troop G’s primary jurisdiction is the I-95 corridor from Greenwich to Branford, which has a high volume of commercial traffic. Overall, CSP experienced just over a 192 percent increase in the number of traffic stops involving commercial vehicles for FY 2009 through FY 2012, from 4,520 to 13,210.

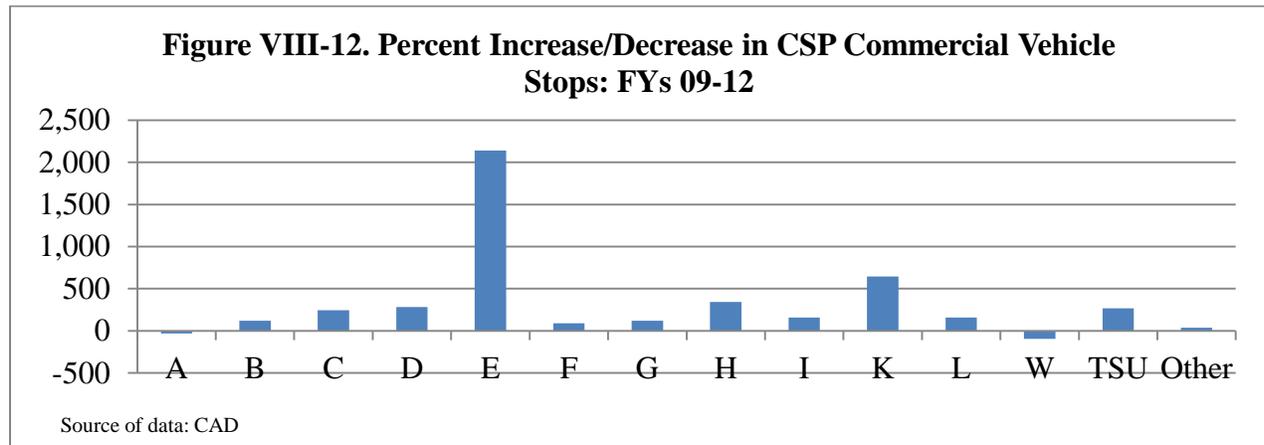
Troop	FY 09	FY 10	FY 11	FY 12	Average
TSU*	1,894	1,402	2,902	6,976	3,294
G	831	1,177	3,122	1,824	1,739
H	235	407	932	1,042	654
C	159	448	804	545	489
I	231	204	507	593	384
A	409	269	535	289	376
L	212	284	298	549	336
K	53	380	355	394	296
F	128	92	327	241	197
B	76	139	173	167	139
E	10	25	244	224	126
D	16	25	95	61	49
W	46	40	7	3	24
Annual Totals	4,520	5,086	10,588	13,210	8,352

*The Traffic Services Unit is a specialized unit within the state police. A primary responsibility of the unit is to provide proactive traffic control on a statewide basis. The unit has troopers solely dedicated to highway speed enforcement, as well as commercial vehicle, DWI, and accident reconstruction components.

** “Other” includes accidents responded to by sworn personnel stationed at headquarters and instances where committee staff determined through CAD that multiple troops responded. Also, Troop W merged with Troop H in March 2012.

Source of data: CAD

Percent change by troop. Figure VIII-12 shows all but one troop (excluding Troop W) experienced increases in its number of commercial vehicle stops. The most dramatic percentage increase occurred in Troop E, which saw its number of commercial traffic stops rise from 10 in FY 09 to 224 in FY 12, or 2,140 percent. Troop K saw a 643 percent rise in commercial vehicle stops, the second most among the troops. Troop A was the only troop to experience an overall decline in the percent of commercial traffic stops, at -29 percent.



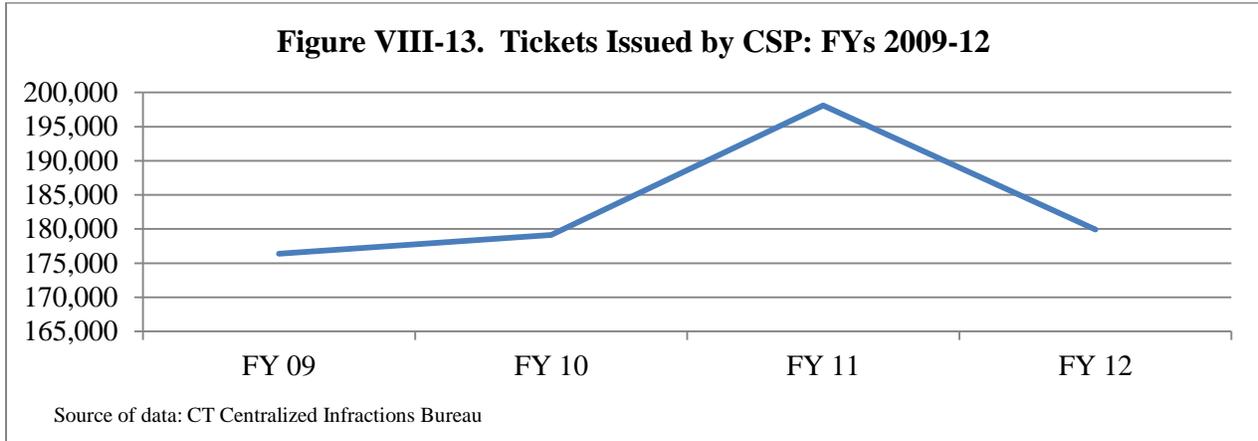
Tickets

Traffic stops, whether for commercial or non-commercial vehicles, can result in various outcomes by state troopers. Officers may simply give drivers warnings or issue actual traffic tickets for an offense(s). Regardless, the mere presence of law enforcement on highways and secondary roads along with issuing tickets to drivers for traffic offenses, are two factors considered by many as ways to increase roadway safety by slowing down traffic and decreasing the number of vehicle accidents.

In Connecticut, the Centralized Infractions Bureau (CIB), within the Judicial Department, is the state’s repository for law enforcement traffic ticket information. Committee staff collected state police ticket data from CIB to determine if any trends occurred in the number of tickets issued statewide and by individual troop for fiscal years 2009 through 2012. It is important to note that beginning in late FY 10, the state police implemented a new automated system for issuing tickets. Known as “e-Ticket” the technology allows officers to issue and print tickets automatically without writing out the infraction by hand. The ticket information is electronically entered to in CAD and sent to the infractions bureau. Currently, the state police operate 138 e-Ticket devices in the field, with an additional 200 forthcoming. Each machine costs approximately \$1,000.

Total tickets issued. The total number of tickets issued by the Connecticut State Police for FYs 2009-2012 is provided in Figure VIII-13. Overall, the number increased by 2 percent, from 176,376 in FY 09 to 179,944 in FY 12. There was a sharp increase in FY 11, when over 198,000 tickets were issued. This is consistent with the previous analysis for commercial vehicle stops when there was a sharp increase the same year. In FY 12, however, there was a drop in tickets issued in FY 12. Given there was a consistent decrease in the overall number of accidents

responded to CSP, this seems to run contrary to the notion that more tickets issued impacts accident rates.



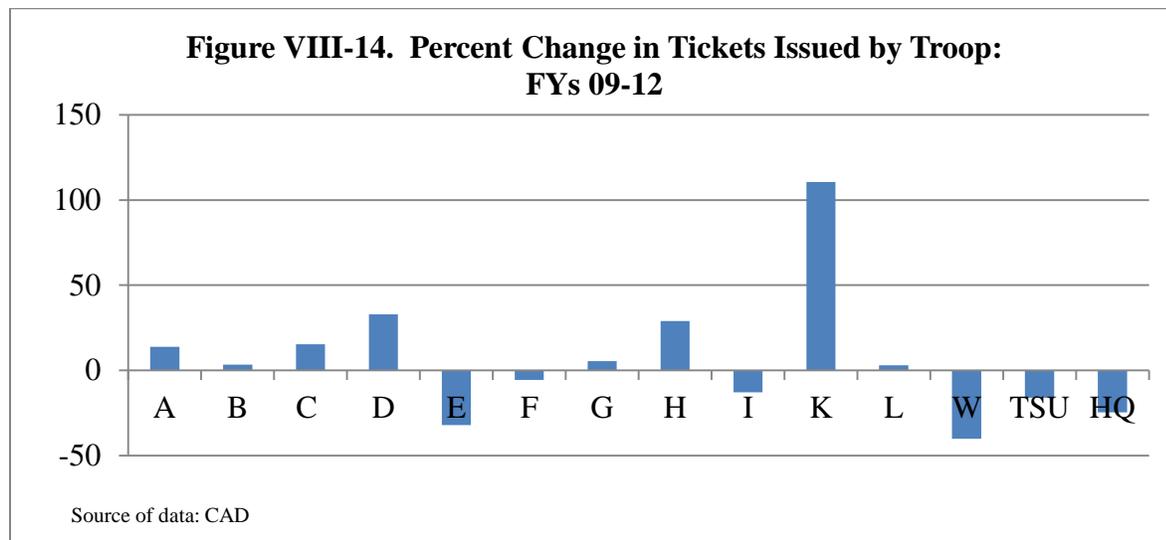
Tickets issued by troop. The yearly number, and average, of tickets issued by troop for FYs 09-12 is provided in Table VIII-7. Consistent with much of the traffic-related analysis presented above, Troop G led the troops with the highest average number of tickets issued annually, at just over 23,500, while Troop B had the lowest average, with just under 4,000. The Traffic Services Unit, which is a specialized unit and not a troop but has roadway safety as its key responsibility, averaged the most number of tickets issued, with almost 33,000. It interesting to note, that the number of tickets issued by troopers located in the CSP headquarters increased by three times between FY 10 and FY 11, from 7,140 to 22,548, but then sharply decreased in FY 12, to 2,463.

Table VIII-7. Tickets Issued by Troop: FYs 2009-12.

Troop	FY 09	FY 10	FY 11	FY 12	Average
TSU	38,264	34,051	26,347	32,146	32,702
G	22,828	22,342	24,801	24,086	23,514
F	18,670	19,707	18,482	17,628	18,622
H	11,358	17,802	19,824	14,656	15,910
A	14,694	12,605	16,269	16,720	15,072
I	16,365	15,038	14,105	14,265	14,943
E	14,370	13,255	12,567	9,744	12,484
C	9,718	9,870	10,925	11,216	10,432
K	7,027	6,935	11,469	14,796	10,057
D	8,117	6,640	8,565	10,793	8,529
L	6,487	7,470	6,654	6,681	6,823
B	3,760	4,265	4,013	3,885	3,981
W	1,447	2,039	1,560	865	1,478
Annual Totals	176,376	179,159	198,129	179,944	183,402

Source of data: CIB

Percent change by troop. Troop K experienced the sharpest percent increase in the number of tickets for FY 09-12, at just over 110 percent, as shown in Figure VIII-14. Meanwhile, the number of tickets issued by Troop E dropped by 32 percent for the same period.



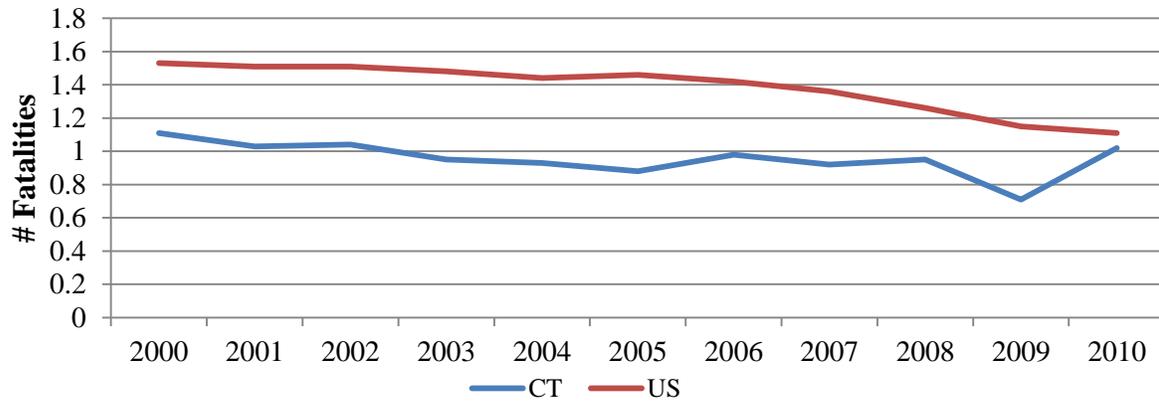
Fatalities

The number of motorist fatalities is key indicator of highway safety. Obviously, multiple factors beyond the control of law enforcement contribute to fatal accidents. As previously noted, however, efforts by law enforcement, including the mere existence of police on roadways and the rates at which traffic stops are made and tickets issued, are viewed by many as ways to help mitigate roadway accidents, including fatal accidents.

Fatal crashes, and their underlying causes, are multi-faceted and can be analyzed in numerous ways. Committee staff examined fatal accidents in Connecticut from several perspectives. First, a comparison of trends in the overall rate of traffic fatalities in Connecticut with national rates was made. Next the number of fatal accidents, and the total number of fatalities resulting from those accidents, for the areas patrolled by the state police, were examined both in the aggregate and at the individual troop level. (Keep in mind the number of fatal accidents may result in more than one fatality, thus the overall number of fatalities in a given year is generally greater than the number of fatal accidents.) Finally, a comparison with CSP staffing data was made to identify any correlation between state police staffing levels and traffic fatalities within CSP's primary jurisdiction.

State and national trends. Figure VIII-15 shows the trends in fatalities resulting from crashes at the national level and for Connecticut for 2000-2010. As a way to make the trends comparable for analysis, fatalities are based on the rate per 100 million vehicle miles traveled.

**Figure VIII-15. Fatal Crash Trends: Connecticut vs. U.S.
2000-2010**
(fatalities per 100 million vehicle miles traveled)



Source of data: National Highway Traffic Safety Administration: Fatality Analysis Reporting System

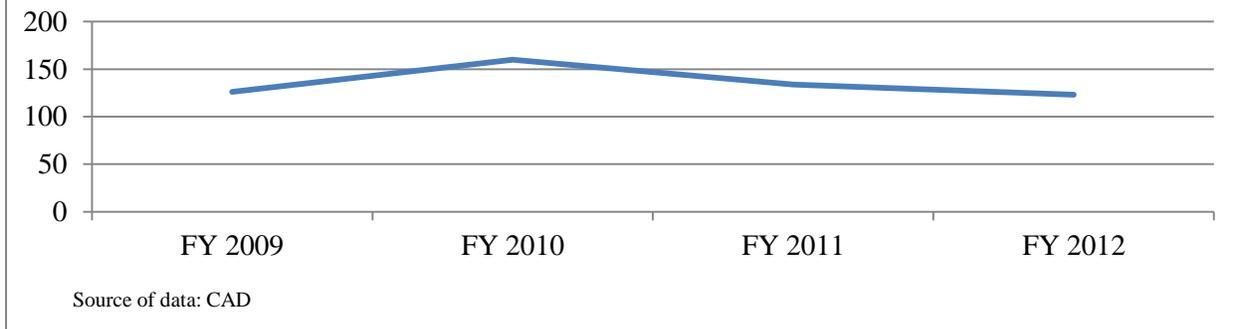
From 2000-2010, Connecticut experienced a lower annual rate of fatalities per 100 million miles traveled each year than the national rate. Although, beginning in 2005, the U.S. rate steadily dropped through 2010, while the Connecticut rate fluctuated, trending upward due in large part by the sharp increase in fatalities in 2010.

Connecticut averaged 0.96 fatal accidents for 2000-2010, while the U.S. average was 1.38. This represents a 30.4 percent difference in the average number of fatalities per 100 million vehicle miles traveled. At the same time, however, the overall national trend from 2000 to 2010 declined at a higher rate than Connecticut's. Nationally, the annual rate of fatalities dropped 27.4 percent, from 1.53 fatalities in 2000 to 1.11 in 2010. For the same period, Connecticut's overall fatality rate declined 8.1 percent, from 1.11 fatalities to 1.02.

Traffic fatalities. Figure VIII-16 shows the trend in the number of traffic fatalities responded to by the state police for FYs 09-12. Total traffic fatalities increased from 126 to 160 from FY 09 to FY 10, or 26.9 percent. The number steadily dropped the following two fiscal years, to 134 in FY 11 and 123 in FY 12. Over the four-year period, there were 543 traffic fatalities resulting from 503 fatal crashes responded to by CSP. In addition, about four percent of the accidents responded to by CSP result in fatalities.

Data for the number of traffic fatalities for Connecticut are available by calendar year through 2010. Since 2000, the annual number of fatalities statewide has averaged 300.5, ranging from a low of 224 in 2009 to a high of 341 in 2000.

**Figure VIII-16. Traffic Fatalities Under CSP Primary Jurisdiction:
FYs 2009-12**



Incidence of traffic fatalities by troop. Table VIII-8 shows the total traffic fatalities responded to by CSP at the individual troop level for FYs 09-12. The table also shows the yearly average number of fatalities. Overall, Troops H and G, both “highway troops,” responded to the highest average number of traffic fatalities resulting from crashes at 16.3 and 15.0 fatalities respectively. Troops B and L responded to the fewest traffic fatalities, averaging 3.8 and 4.8 respectively.

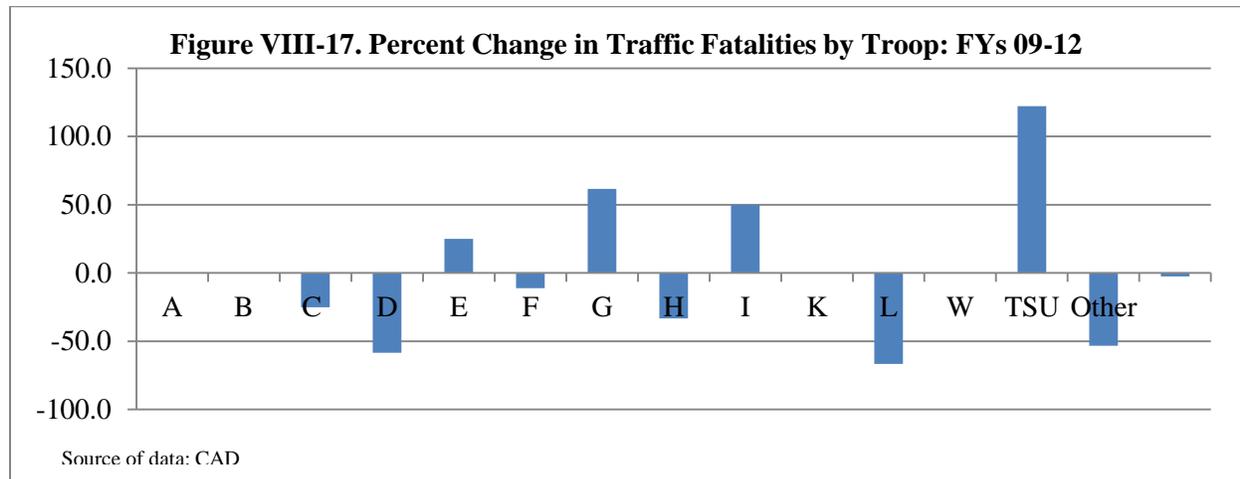
Table VIII-8. Traffic Fatalities Responded to by Troop: FYs 2009-12

Troop	FY 09	FY 10	FY 11	FY 12	Average
H	18	21	14	12	16.3
G	13	11	15	21	15.0
Other	15	16	21	7	14.8
E	8	20	13	10	12.8
C	12	12	14	9	11.8
K	14	8	11	14	11.8
D	12	13	10	5	10.0
TSU	9	9	2	20	10.0
I	4	18	8	6	9.0
F	9	9	7	8	8.3
A	5	11	8	5	7.3
L	3	8	7	1	4.8
B	4	3	4	4	3.8
W	0	1	0	1	0.5
Totals	126	160	134	123	135.8

Source of data: CIB

Change in traffic fatalities by troop. For the four-year period analyzed, the Traffic Services Unit experienced the highest percent change in the number of traffic fatalities responded to by CSP, as shown in Figure VIII-17. Such fatalities increased 122 percent, from 9 in FY 09 to 20 in FY 12. It should be noted that TSU responded to an unusually high number of crashes involving fatalities in FY 12, which accounts for the high overall percent increase. Following TSU, Troop G saw almost a 62 percent increase in fatalities resulting from accidents,

while Troop I's increase was 50 percent. Conversely, Troop L's rate dropped almost 67 percent and Troop D's by just over 58 percent. Overall, the rate of fatalities resulting from crashes for CSP declined 2.1 percent for the time span examined.



Alcohol-impaired driving fatalities. A subtype of traffic fatalities of interest are those fatalities involving alcohol in which at least one driver was considered legally impaired, and how Connecticut compares against national statistics. Table VIII-9 shows that the number of alcohol-impaired driving fatalities (per 100 million vehicle miles traveled) was consistently lower in Connecticut than the national rates. The only exception to this is in 2010, when Connecticut's rate was 0.38 and the U.S. rate was 0.34.

Year		Total Fatalities in all Crashes	Alcohol-Impaired Driving Fatalities (BAC = .08+)**		
			Number	Percent	Per 100 Million VMT
2007	Connecticut	296	111	38	0.35
	US	41,259	13,041	32	0.43
	Best State*			19	0.21
2008	Connecticut	302	95	31	0.30
	US	37,423	11,711	31	0.39
	Best State*			16	0.16
2009	Connecticut	224	97	43	0.31
	US	33,883	10,759	32	0.36
	Best State*			17	0.16
2010	Connecticut	320	119	37	0.38
	US	32,999	10,136	31	0.34
	Best State*			18	0.17

*State (or States) with lowest percents; lowest percents could be in different states
 **Based on the BAC of all involved drivers and motorcycle riders only
 Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System 2007-2010 Final.

Highway Safety and CSP Staffing: Statistical Correlation Analysis

Certain aspects of highway safety were analyzed to more fully understand the statistical relationship between highway safety and state police staffing. The analysis, presented below, focuses on accidents with injuries, including fatal accidents, driving while impaired, and tickets issued. Although few of the highway safety-related factors were statistically related to state police active sworn personnel staffing, it is clear that state police sworn personnel are needed to patrol the state's highways for traffic control and safety, and to provide emergency service when necessary.

Accidents with Injuries and Staffing Levels

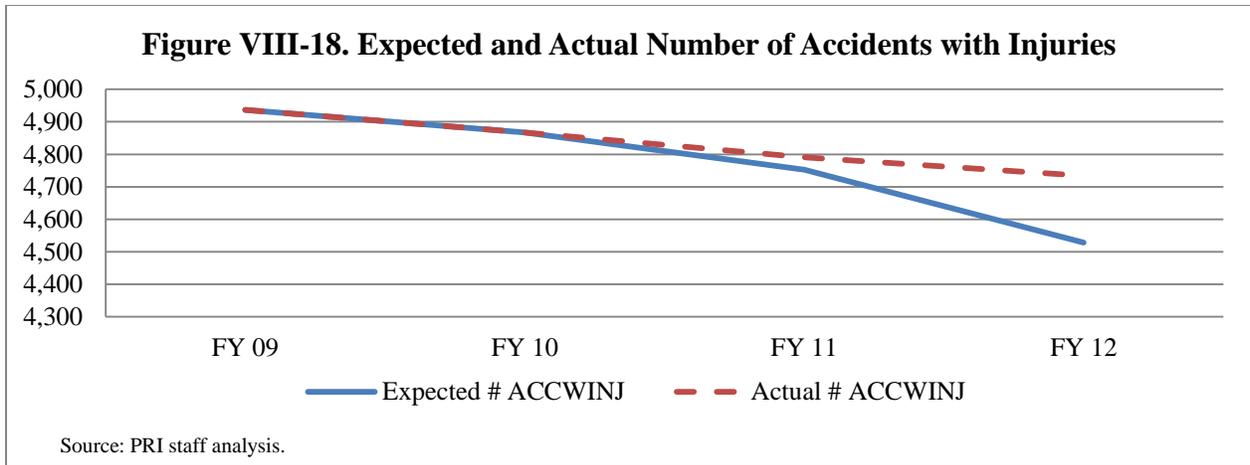
Active sworn personnel in CSP, regardless of regular assignment, patrol at least one hour of every working day as part of their General Patrol responsibilities. The number of active CSP sworn personnel and accident information are shown in Table VIII-10.

There was a 14 percent decline in active sworn personnel during FY 09 through FY 12. As described earlier, and as seen in the table, the total number of accidents on roadways under CSP jurisdiction also declined eight percent, and the number of accidents with injuries declined four percent during this same time period. Overall, however, no statistically significant correlation was found between staffing levels and number of accidents, or number of accidents with injuries. Thus, as staffing levels declined, there was not a corresponding increase in accidents.

Table VIII-10. Accidents with Injuries and Staffing Levels: FY 09-FY 12				
	FY 09	FY 10	FY 11	FY 12
# Accidents	34,761	34,266	33,475	31,888
# Accidents with Injuries	4,937	4,867	4,791	4,734
% of Accidents with Injuries	14.2%	14.2%	14.3%	14.8%
# Active Sworn	1,186	1,092	1,092	1,017

Source: CAD Data ("actual call type") and CORE-CT personnel data.

There was, however, a relatively smaller decrease in accidents with injuries, compared with accidents overall; accidents with injuries now account for a slightly higher percent of all accidents ($\chi^2=7.49$, $p < .05$). In addition, based on the overall number of accidents, Figure VIII-18 shows the actual and expected number of accidents with injuries had 14.2 percent of all accidents continued to result in injuries.



Issuance of Tickets and Staffing Levels

Table VIII-11 shows no statistically significant relationship between the number of tickets issued and the total number of active patrol and resident state troopers and Traffic Services Unit active sworn personnel. Despite a relatively steady two percent decline annually in number of sworn personnel likely to issue tickets, there was an increase and decline during this same period of time, regardless of staffing level ($r=.439$, $p > .05$).

Table VIII-11. Issuance of Tickets and Staffing Levels: FY 09-FY 12				
	FY 09	FY 10	FY 11	FY 12
# Tickets Issued	176,376	179,159	198,129	179,944
% change in tickets issued from previous year		+1.6%	+10.6%	-9.2%
# Active Patrol/ Resident State Troopers and TSU Sworn Personnel	564 +41=605	555 +36=591	544 +34=578	539 +29=568
% change in Staffing Level		-2%	-2%	-2%

Source: CAD Data and CORE-CT personnel data.

Issuance of Tickets and Accidents With Injuries

Table VIII-12 shows that, despite the issuance of more or less tickets by CSP, the percent of accidents with injuries increased from FY 09 through FY 12. Thus, there does not appear to be a relationship between the issuance of tickets and accidents with injuries ($r=.471$, $p > .05$).

Table VIII-12. Accidents with Injuries and Issuance of Tickets: FY 09-FY 12				
	FY 09	FY 10	FY 11	FY 12
# Accidents	27,998	28,783	29,569	29,334
# Accidents with Injuries	3,873	3,997	4,195	4,305
% of Accidents with Injuries	14.2%	14.2%	14.3%	14.8%
# Tickets Issued	176,376	179,159	198,129	179,944
% change in tickets issued from previous year		+1.6%	+10.6%	-9.2%

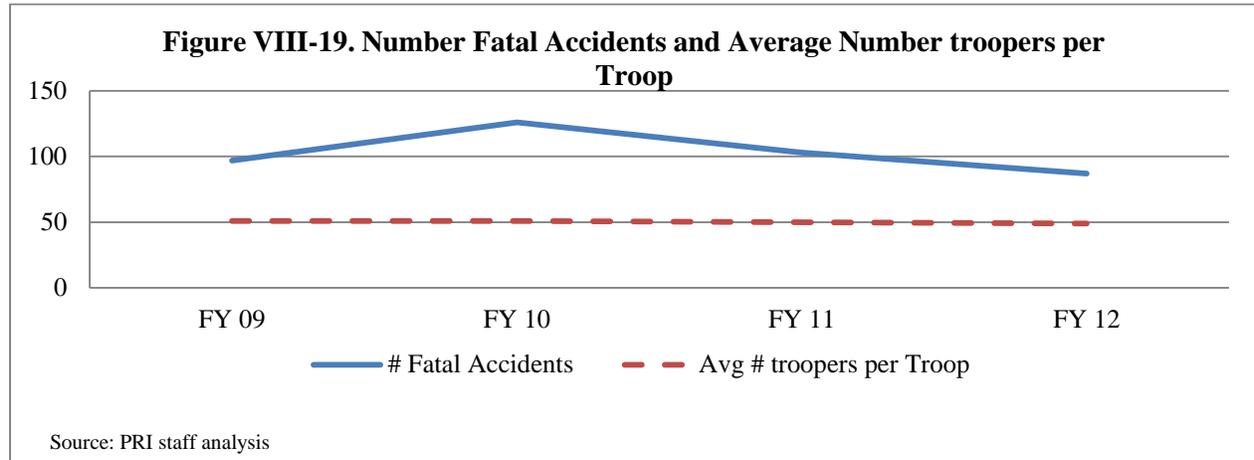
Source: CAD Data and CORE-CT personnel data.

Fatal Accidents and Staffing Levels

The possible association between staffing levels and fatal accidents was examined. Table VIII-13 shows an increase in fatal accidents in FYs 09 and 10, and a decrease in FYs 11 and 12. At the same time, there was a four percent decrease in in the number of active troopers in the Troops and an overall 14 percent decrease in active sworn personnel. As further shown in Figure VIII-19, there is no association between fatal accidents and number of active troopers for this four year period ($r=.371, p>.05$).

Table VIII-13. Fatal Accidents and Staffing Levels: FY 09-FY 12				
	FY 09	FY 10	FY 11	FY 12
# Accidents	27,998	28,783	29,569	29,334
# Fatal Accidents	97	126	103	87
# Active Troopers	564	555	544	539
Total # Active Sworn	1,186	1,092	1,092	1,017

Source: CAD Data and CORE-CT personnel data.



Fatal Accidents and Issuance of Tickets

Table VIII-14 shows no relationship between the issuance of tickets and the number of fatal accidents. For FYs 10-12, the decline in the number of fatal accidents appears to have no association with the changes in the number of tickets issued.

Table VIII-14. Fatal Accidents and Issuance of Tickets: FY 09-FY 12				
	FY 09	FY 10	FY 11	FY 12
# Fatal Accidents	97	126	103	87
% change in fatal accidents		+30%	-18%	-16%
# Tickets Issued	176,376	179,159	198,129	179,944
% change in tickets issued from previous year		+1.6%	+10.6%	-9.2%

Source: CAD Data and CORE-CT personnel data.

Incidences of DWI

The CAD system captures incidences related to DWI, which almost always result in arrest (99 percent of the time). Table VIII-15 shows the overall 12.7 percent decrease in the number of DWI incidences responded to by all sworn personnel in CSP. There is wide variability across the Troop in DWI arrests, with Troops C, D and K more than quadrupling the number of DWIs from FY 09 to FY 12. Other Troops, such as Troops B, E, and F had at least a 10 percent decrease in the number of DWIs from FY 09 to FY 12.

Table VIII-15. Number of DWIs in CAD Per Troop: FY 09 to FY 12					
Troop	# DWI Arrests				% Change from FY 09 to FY 12
	FY 09	FY 10	FY 11	FY 12	
A	267	254	264	276	+3.4%
B	123	133	126	100	-18.7%
C	288	293	358	414	+43.8%
D	149	156	171	221	+48.3%
E	541	559	611	483	-10.7%
F	262	226	229	211	-19.5%
G	252	227	263	264	+4.8%
H	277	340	253	209	-24.5%
I	142	145	126	145	+2.1%
K	166	194	196	293	+76.5%
L	225	231	208	206	-8.4%
Two Troops	655	459	421	228	-65.2%
TSU	8	1	7	6	
Troop W	24	13	5	1	
HQ	211	136	105	76	-64.0%
Total	3,590	3,367	3,343	3,133	-12.7%

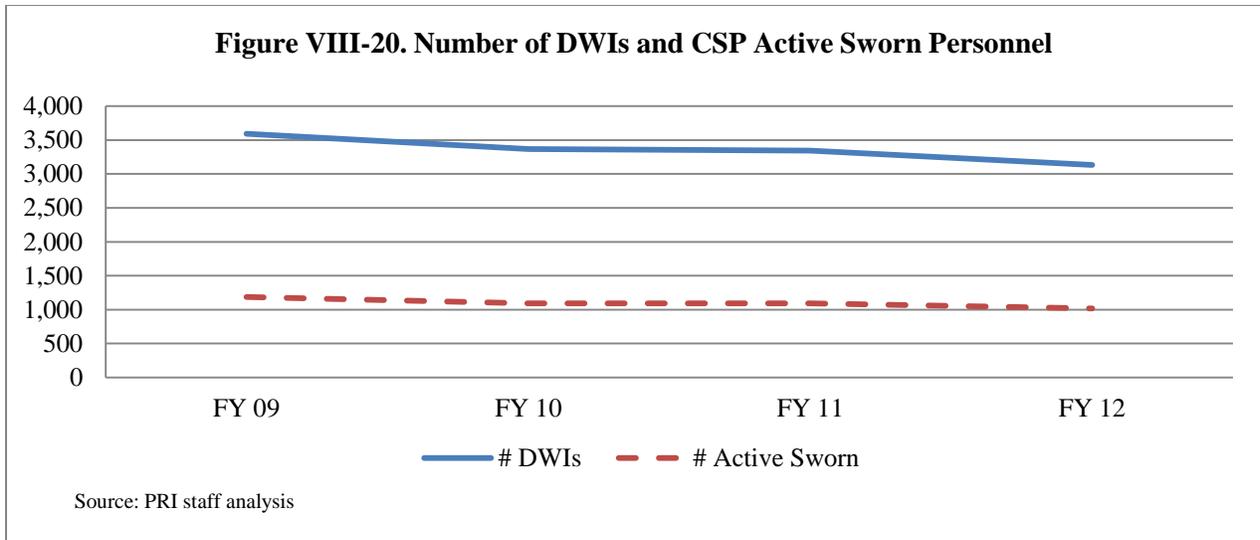
Source: CAD

Incidences of DWI and Staffing Levels

Table VIII-16 shows the relationship between the incidences of DWI and staffing levels. For FYs 09-12, the trend in the number of DWIs is quite similar to the trend in the number of sworn personnel (Figure VIII-20).

Table VIII-16. DWIs and Staffing Levels: FY 09-FY 12				
	FY 09	FY 10	FY 11	FY 12
# DWIs	3,590	3,367	3,343	3,133
% change in DWIs		-6%	0%	-6%
# Active Sworn Personnel	1,186	1,092	1,092	1,017
% change in active sworn personnel from previous year		-8%	0%	-7%

Source: CAD Data and CORE-CT personnel data.



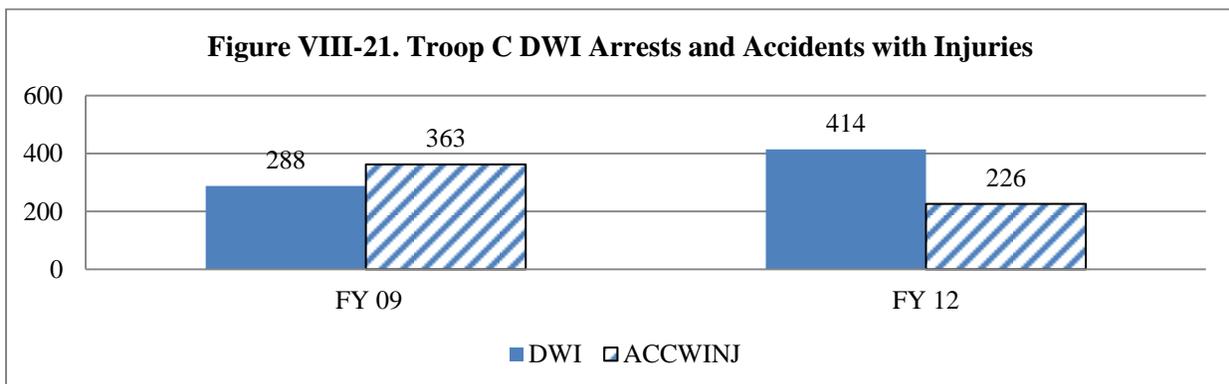
While it is conceivable that the number of individuals driving while intoxicated has coincidentally decreased or remained constant during the same times that CSP sworn personnel decreased or remained constant, another interpretation of this data is that fewer CSP are available to apprehend intoxicated drivers.

Relationship Between DWI and Accidents With Injuries

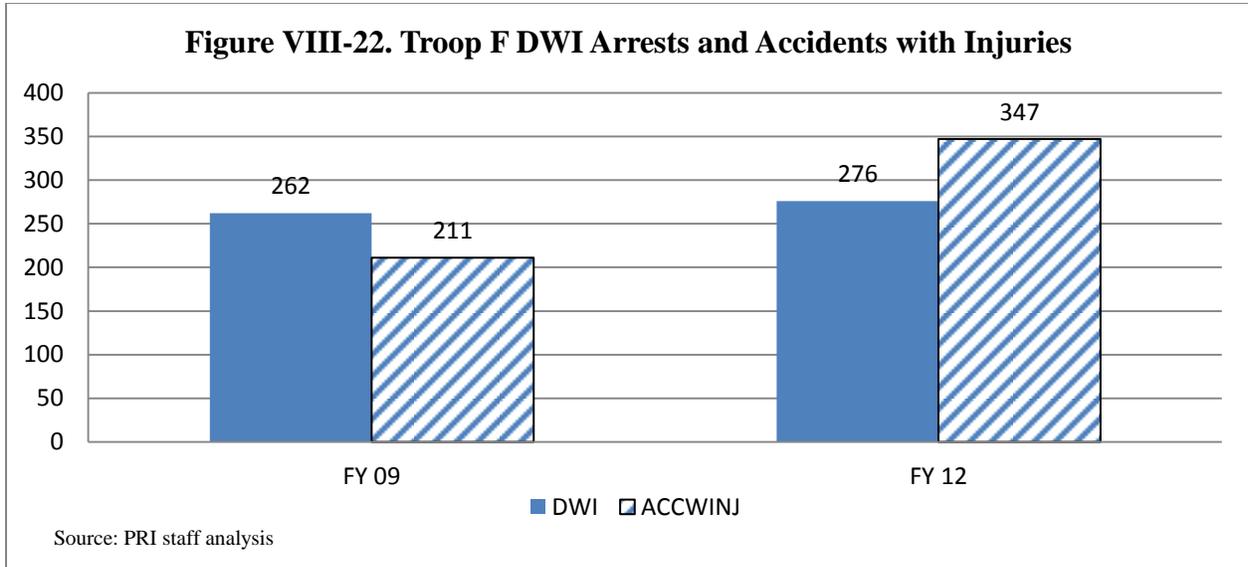
With the overall number of accidents decreasing and the number of DWIs decreasing, are there examples of individual Troops that markedly increased or decreased the number of DWIs, and if so, what were the number of accidents with injuries during that time period?

Overall, there was no statistically significant association between the number of DWIs and accidents with injuries in the Troops. Patterns were found in several Troops, however, which may prove useful to CSP in future strategies in this area.

For example, as show in Figure VIII-21, unlike the decrease in DWIs found for CSP as a whole, Troop C had a 44 percent increase in DWIs. For this same time period, Troop C also had a 38 percent decrease in the number of accidents with injuries. This same pattern was not necessarily repeated in other Troops.



Another example is shown in Figure VIII-22. Similar to CSP as a whole, Troop F had a decrease in DWIs (19 percent). For the same time period, Troop F also had a 26 percent increase in the number of accidents with injuries. Similar to the caveat noted for Troop C, this same pattern was not necessarily found in other Troops.



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Citizen Satisfaction with Connecticut State Police

Theory being tested:

As staffing levels **decreased**, citizen satisfaction **decreased**

Findings:

- The number of commendations, complaints and inquiries are monitored by the CSP Internal Affairs Unit
- Very little of citizen contact with CSP is for purposes of praise or commendation (range of 37-72 annually during CY 2008-2011)
- The annual number of low level complaints ranged from 199 to 593, and the more serious Internal Affairs Investigations ranged from 22 to 90 during CY 2008-2011
- The total number of complaints has been declining, and was at its lowest level in CY 2011
 - Lower level complaints decreased 60% from CY 2008-2011
 - The most serious complaints, leading to an Internal Affairs investigation, decreased by 40% from CYs 2008-2011
- Administrative Inquiry complaints showed a more than five-fold increase from CYs 2008 to 2011, attributable in part to a change in practice of investigating the accidental discharge of a Taser Device as an Administrative Inquiry
- As the number of staff declined, so did the percent of citizen contacts that were complaints

Conclusion:

While the number of sworn personnel decreased by 14 percent, the number of complaints decreased by 51 percent. Based on the information used for this analysis, there were no indications that decreased staffing levels adversely impacted citizen satisfaction as measured by formal complaints and commendations processed by the Internal Affairs Unit

Background. One assessment of the performance of the CSP is Connecticut citizenry satisfaction with CSP. The department maintains records on the number of complaints and compliments reported to CSP by citizens. The department considers this feedback from the public essential to their responsiveness to the needs of the community.⁷⁴

⁷⁴ CSP Internal Affairs Unit Annual Reports.

Within the Bureau of Professional Standards and Compliance, the Internal Affairs Unit conducts all internal investigations of allegations of misconduct by sworn personnel and most civilian employees including Constables under the supervision of the Resident State Trooper program. Alleged misconduct investigations fall into three categories:

- Complaint
- Administrative inquiry
- Internal affairs investigation

Table IX-1 provides some information about the three types of complaints.

Table IX-1. Information About Types of Complaints		
Category	Seriousness	Examples of complaints that fall into this category
Complaint	The initial categorization for all complaints received by the Internal Affairs Unit, and remain at this level if not considered to fall into one of the more serious categories	<ul style="list-style-type: none"> • Handled at the Troop level with resolution including letter to citizen from Troop command personnel
Administrative Inquiry	If sustained, would result in no more than Letter of Reprimand	<ul style="list-style-type: none"> • Accidental discharge of a taser device
Internal Affairs Investigation	If sustained, could result in filing of criminal charges or imposition of serious discipline	<ul style="list-style-type: none"> • Improper discharge of a firearm • Bias allegations • Sexual harassment • Civil rights violations • Actions that resulted in death or serious physical injury
Source: CSP Internal Affairs Unit Annual Reports.		

There are also “Miscellaneous Inquiries” that involve substantive contact with the Internal Affairs Unit, but are not considered complaints about CSP sworn personnel. The inquiries could be unrelated to CSP and forwarded to the appropriate jurisdiction, or related to CSP and then forwarded to the appropriate unit within the department.

The number of formal compliments or praise is also monitored by the Internal Affairs Unit. The Department of Emergency Services and Public Protection website provides information to citizens on how to make commendation and complaints.

For feedback and suggestions: Citizens are instructed to contact their local Troop to provide feedback concerning operational procedures or recommendations on how to improve service.

For commendations: Citizens are asked to write brief letters or emails describing the incident and actions the employee demonstrated that the citizen felt was exceptional. Citizens may also speak with the individual’s supervisor and make a verbal commendation.

For complaints or inquiries: Citizens are asked to lodge a complaint or make an inquiry by letter, email, telephone, or in person. Complaints against personnel are to be directed to the on-duty supervisor, commander of the Troop or District, or the Internal Affairs Section.

If the inquiry or complaint appears to be based on a misunderstanding, the State Trooper may offer an explanation, and if not satisfied with the explanation, may speak with his/her supervisor.

Concerns considered operational in nature are generally handled at the Troop level. More serious complaints warranting an investigation may include review of all applicable reports, policies and procedures, examination of any evidence or medical records, and interviews with all parties and witnesses involved.

Citizen satisfaction with CSP. The source of information for this section is the Internal Affairs Unit annual reports for Calendar Years 2008-2011. The reports contain information on the incidences of complaints and commendations and results of any inquiries and investigations. Table IX-2 shows the number of complaints and commendations for sworn personnel and civilian employees.

Table IX-2. Complaints and Commendations: CY 2008-2011				
Citizen:	CY 2008	CY 2009	CY 2010	CY 2011
Commendations	64	67	72	37
All Complaints	593	383	322	290
Low-level Complaints	497	332	241	199
Administrative Inquiries	6	7	20	37
Internal Affairs Investigations	90	44	61	54
Miscellaneous Inquiries	311	258	212	352

Source: CSP Internal Affairs Unit Annual Reports.

Figure IX-1 shows that very few of the citizen contact is for purposes of praise or commendation. On the other hand, the number of complaints has been declining, and was at its lowest point in 2011.

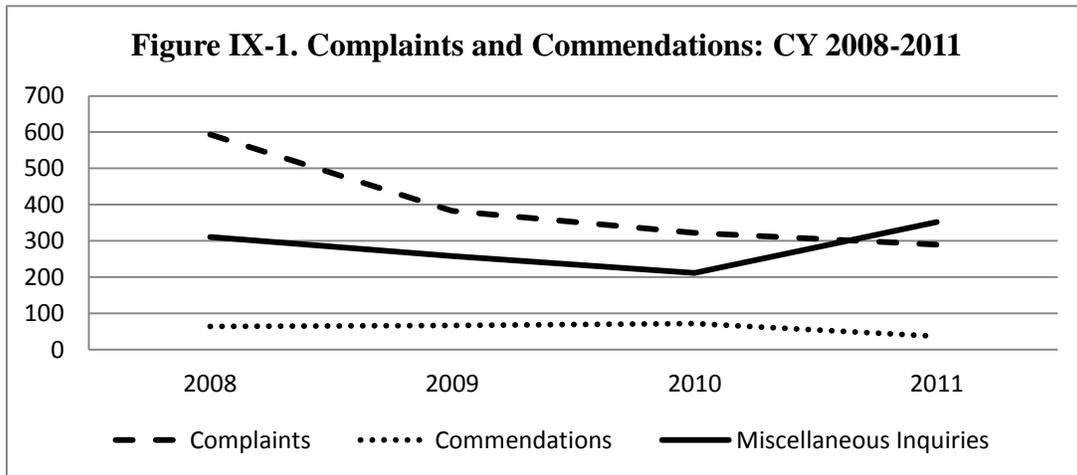


Figure IX-2 shows the proportion of citizen contact that is categorized as a complaint, commendation or miscellaneous. Although the percent of commendations was at its lowest in 2011, it was also at its highest in the prior year. Complaints in 2011 accounted for less than half of all citizenry contact, the lowest percent of the four years analyzed.

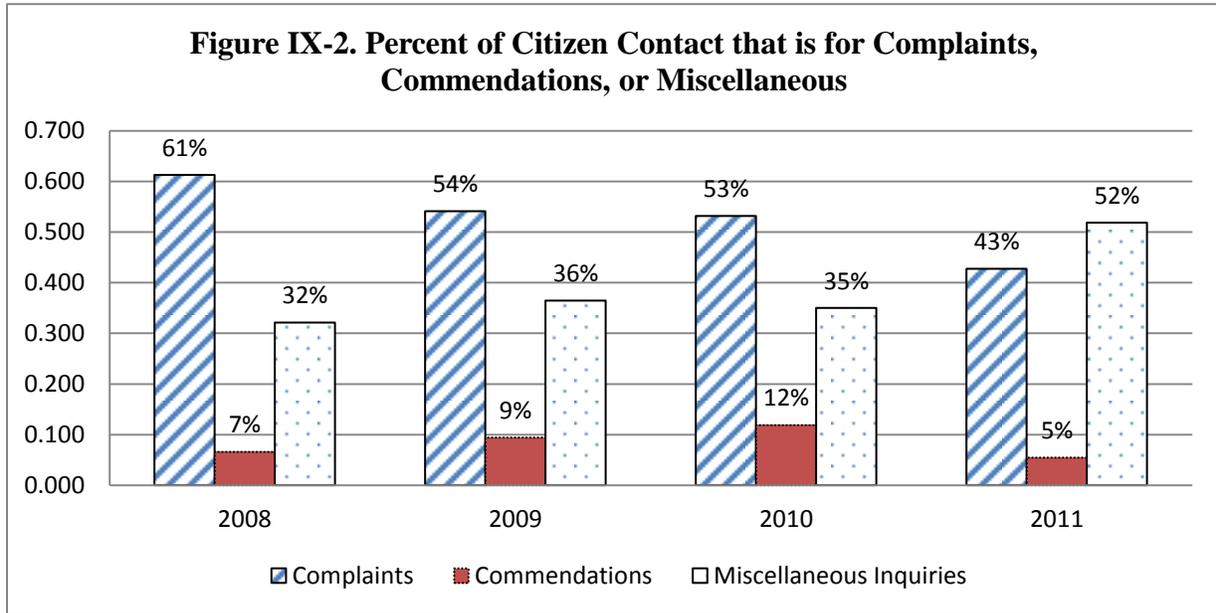
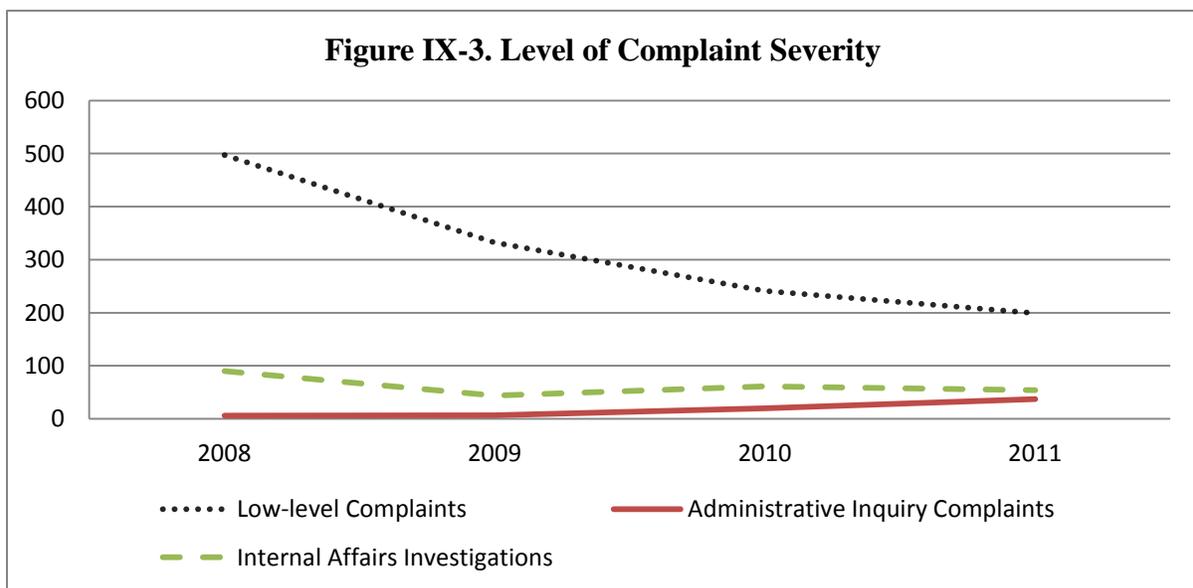


Figure IX-3 shows the proportion of complaints that were either the 1) least serious; 2) warranted an administrative inquiry; or 3) resulted in an Internal Affairs investigation. The lower level complaints have decreased 60 percent from 2008 to 2011. The most serious complaints, leading to an Internal Affairs investigation also decreased from 2008 to 2011, by 40 percent. Only the Administrative Inquiry complaints showed a more than five-fold increase from 2008 to 2011.



According to the Internal Affairs Annual Reports of 2010 and 2011, the increase is attributable to the change in practice of investigating the accidental discharge of a Taser Device as an Administrative Inquiry. This practice, which was started in 2010, was done to provide a consistent response to such incidents. The Internal Affairs Unit investigated 26 accidental taser discharges in 2011, compared to 7 in 2010. The 2011 Annual Report notes that the 26 incidents led to retraining of each individual Trooper or Constable involved in the incident, and the development of a department training bulletin to help reduce future accidental occurrences.

The 2011 Annual Report of the Internal Affairs Unit summarizes the nature of Internal Affairs Unit investigations and Administrative Inquiries for CYs 2008-2011 (Table IX-3).

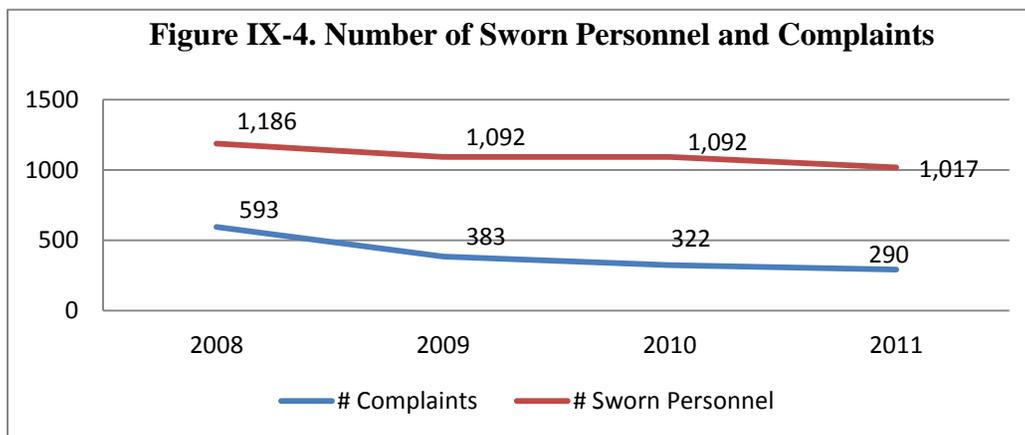
Nature of Inquiry/Investigation	2008	2009	2010	2011
Criminal	8	7	14	4
Excessive Force	1	4	3	3
Civil Rights	3	1	0	0
Rules & Regulations	62	34	51	75
Expectations of Performance	20	11	11	7
Discharge of Firearms	2	1	3	3
Total	96	58	82	92

Source: 2011 Annual Report of the Internal Affairs Unit.

Citizen Satisfaction with Connecticut State Police and Staffing Levels

The relationship between citizen satisfaction with CSP and staffing levels was analyzed. A potentially lower staffing level could result in greater dissatisfaction with CSP services by citizens, the consumers of this service.

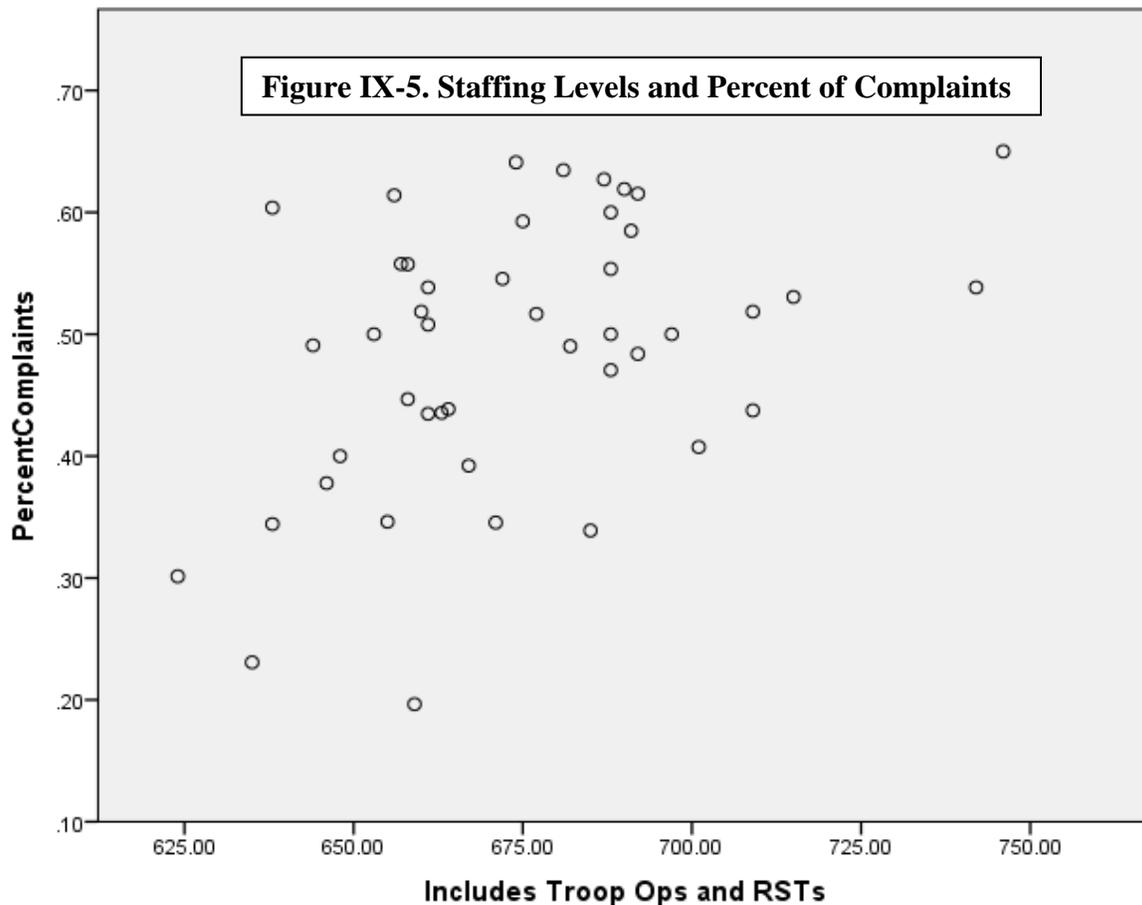
The data provided to PRI was not separated out by sworn vs. civilian, nor were municipal/constable complaints separated out from those specific to CSP. Given these, caveats, Figure IX-4 shows the number of active sworn personnel (excluding light duty) and the number of citizen complaints processed by the Internal Affairs Unit.



The number of complaints has not increased as the number of sworn personnel has decreased. As the number of sworn personnel decreased by 14 percent, the number of complaints decreased by 51 percent. This measure does not appear to be adversely impacted by staffing levels. In addition to the Internal Affairs Annual Reports, more detailed information was provided to PRI on the number of citizen complaints, commendations and miscellaneous inquiries that occurred each month from 2009-2012. PRI staff analyzed the possible correlation between monthly complaints and monthly staffing levels for active patrol and resident state troopers. There was no statistically significant correlation between staffing levels and percent of monthly commendations.

Further, there was an unexpectedly positive association between staffing levels and percent of complaints (Figure IX-5). As the number of staff declined, so did the percent of citizen contacts that were complaints.

Based on the information used for this analysis, there are no indications that past and current staffing levels are adversely impacting citizen satisfaction as measured by formal complaints and commendations processed by the Internal Affairs Unit.



Shift Relief Factor

Shift Relief Factor (SRF) Development and Implementation

Findings:

- There are approximately 231 CSP daily patrols⁷⁵ used to provide around-the-clock coverage to the citizenry of Connecticut across 11 different Troops
 - The number of patrols has remained relatively unchanged for many years
- The Shift Relief Factor (SRF) is a mathematical calculation used to determine how many personnel are needed to staff these patrols
 - The SRF takes into consideration the amount of hours a trooper is available to work, taking into account vacation, regular days off, sickness, etc.
- The SRF for FY 12 was 1.95, meaning almost two patrol troopers were needed to staff each patrol
- Applying the SRF of 1.95 to the number of daily patrols, CSP would need approximately 450 (active) patrol troopers to provide the 231 daily patrols
- In FY 12, CSP had, on average, 448 troopers available to perform these patrols, a figure very close to the 450 calculated with the SRF
- Applying the SRF retroactively to FY 09 and FY 10, there were approximately six more troopers than needed to perform the 231 daily patrols
- As of January 31, 2013, however, the average number of patrol troopers available had decreased to 439, indicating a shortage of approximately 11 patrol troopers
 - A graduating class in December 2012 will mitigate this shortfall

Conclusion:

The SRF of 1.95 means that, taking into account the time a trooper is typically available to work, almost two officers are needed for each of the 231 patrols. The actual number of patrol troopers in FY 12 came very close to the number estimated to be needed, using the SRF

The Connecticut State Police provide coverage to the citizenry of Connecticut 24 hours a day, 365 days a year. To determine how many troopers are needed to provide this around the clock coverage, a calculation can be made that takes into consideration the typical patrol trooper 5 days on, 3 days off work schedule, sickness, vacations, and other times away from work.

⁷⁵ A patrol is a route that a single trooper (i.e., “patrol trooper”) travels in a single 9 hour shift.

Developed as part of the Police Allocation Manual methodology⁷⁶ the “shift relief factor” can be used to determine the number of officers needed to provide minimum patrol coverage. Stated another way, the shift relief factor is the number of patrol troopers required to staff one shift position 365 days per year.

Since the SRF is a mathematical formula based on average patrol trooper time away from work (e.g., for sick leave and vacation time), the calculation does not guarantee that the minimum number of patrol troopers will be present for work each day.

All information for this calculation was obtained from time and attendance data contained in CORE-CT, the state’s computer system. The PRI staff calculated shift relief factors for CSP patrol troopers based on information for FY 11 and FY 12. In the future, the CSP may choose to use the FY 12 shift relief factor or an average of the two shift relief factors for FY 11 and FY 12.

Table X-1 shows the patrol trooper average number of hours away from work for FY 11 and FY 12. On average, there were 446 active patrol troopers in FY 11 and 448 active patrol troopers in FY 12 (Active patrol troopers are defined as not out on leave or assigned to light duty on the first of the month).

Table X-1. Average Annual Hours Active Patrol Troopers Unavailable for Duty		
	FY 11 (avg of 446 patrol troopers)	FY 12 (avg of 448 patrol troopers)
Regular Hrs Off	1,233	1,233
Sick Hrs	65.8	76.2
Family Sick Hrs	27.8	30.2
Holiday Hrs	66.5	70.1
Vacation Hrs	124.1	122.6
Personal Hrs	28.0	27.4
Training Hrs	26.6	18.8
Jury Duty Hrs	0.4	0.3
Union Business Hrs	1.6	2.0
Workers Comp Hrs*	6.7	10.9
Military Hrs*	4.7	7.4
Susp/Admin Lv*	0.3	1.0
TOTAL	1,585.5	1,599.9
*For patrol troopers counted as active. Source: CORE-CT time and attendance data.		

Based on information provided by CSP, in both FYs 11 and 12, there were a total of 230.57 Troop patrols on average each day (Some days of the week, such as weekends, may have additional patrols, which accounts for the fractional number of average daily patrols). Table X-2 shows the formula used to calculate the shift relief factor (SRF), which is essentially the number of hours needed for a single patrol 365 days a year, divided by the average number of hours a

⁷⁶ The Police Allocation Manual was developed in 1991 for the National Highway Traffic Safety Administration by the Traffic Institute of Northwestern University. It is a methodology that can be used to determine the number of personnel needed for police traffic and other patrol services. One component of PAM is the shift relief factor.

trooper is available to perform this duty. If a trooper was always available, working 365 days a year, and never getting sick or taking vacation, for example, then the shift relief factor would be 1. Since this would not occur, a shift relief factor of 2, for example, would mean that, for each patrol shift, two patrol troopers are needed.

Table X-2. Calculation of the Shift Relief Factor (SRF)		
Formula for Shift Relief Factor:	$SRF=A/(A-B)$	A=Total # hrs needed to cover 1 shift position per day, 365 days per yr B=Average # of unavailable hrs per officer per yr
A=	9 hrs per shift x 365 days per yr=3,285 hrs	Shift includes ½ hr of General Patrol on either side of the 8 hour Duty shift
B=	Sum of unavailable hrs in Table 1	B=1,585.5 in FY 11 B=1,599.9 in FY 12
A/(A-B)=	$3,285/(3,285-1585.5)$ $3,285/(3,285-1599.9)$	SRF=1.93 in FY 11 SRF=1.95 in FY 12

A SRF of 1.95 means that, to staff a single patrol shift 365 days per year, taking into consideration the average patrol trooper time spent off the job, 1.95 troopers (almost two patrol troopers) are needed. Applying the SRF to the 230.57 daily Troop patrols that need to be staffed:

- **449.6** active patrol troopers were needed in FY 12 (230.57 x 1.95)
- **445** active patrol troopers were needed in FY 11 (230.57 x 1.93)

Applying the current 1.95 shift relief factor, Table X-3 compares the number of active patrol troopers needed and the average number available for FYs 09-13 (FY 13 is based on point in time information from CSP as of January 31, 2013). While FYs 09 and 10 were slightly over the necessary number of patrol troopers needed, FYs 11 and 12 appear to have been very close to the number of patrol troopers needed. The preliminary figures for FY 13 show a potential growing shortage in patrol troopers needed to cover the Troop patrols.

Table X-3. Number of Active Patrol Troopers Needed and Available for FYs 11-13			
	# patrol troopers needed¹	Avg # patrol troopers available	Shortage/Surplus
FY 09	449.6	456	+6.4
FY 10	449.6	456	+6.4
FY 11	445	446	+1
FY 12	449.6	448	-1.6
FY 13	449.6 ²	439 ³	-10.6

¹Assumes 230.57 daily patrols is unchanged
²Uses SRF from FY 12 with the exception of FY 11, where SRF was calculated to be 1.93
³Source: CSP, as of January 31, 2013 staffing level

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Span of Control

Analysis of Span of Control

Findings:

- Span of control is the number of persons reporting to any one supervisor
- In 1997, when the span of control was one sergeant for every six troopers, CSP decided to increase the ratio to 1:8
- The CSP Administration and Operations Manual lists one supervisor for every six-eight troopers or resident state troopers as the optimum span of control
- From FY 09 to FY 12, sergeants in the Troops decreased 9%, nearly four times the rate by which patrol and resident state troopers decreased
- The 1:8 span of control ratio was met in all four years examined, ranging from 6.6 to 7.3 troopers per sergeant
 - However, span of control ratios were not uniform across all Troops with Troops D and K, for example, exceeding the 1:8 ratio in all 12 months of FY 12, sometimes going as high as one sergeant for every 12 troopers

Conclusion:

In FY 12, there were 78 sergeants to supervise 556 patrol and resident state troopers, a span of control of 1:7.1, well within the 1:8 span of control guideline

Some Troops, however, have one sergeant for every 12 troopers, and there may be more of a need for reallocation of sergeants as opposed to addressing a shortage of sergeants

Span of control is the number of persons reporting to any one supervisor. In CSP, sergeants directly supervise patrol troopers. There are various recommended guidelines for span of control pertaining to law enforcement. The National Incident Management System/Incident Command System (ICS) standards state that span of control is the most fundamentally important management principle of ICS, and that a supervisor's span of control should be between 3 and 7, with the ideal span of control a ratio of 1:5.

However, the Commission on Accreditation for Law Enforcement Agencies, Inc. (CALEA) recommends that a supervisor be responsible for no more than 12 officers or 8 beats. Factors CALEA further recommends be considered in determining the appropriate span of control include:

- Experience of patrol personnel (fewer supervisors needed for more experienced personnel)
- Quality of supervisory training
- Time available for supervisors to supervise

Examining the number of sergeants in relation to the number of CSP patrol troopers and resident state troopers (i.e., “span of control”) is a factor in determining whether there are an appropriate number of sergeants, and thus, a proper span of control.

One widely used methodology for determining span of control is described in the Police Allocation Manual (PAM). In 1997, the PAM methodology was applied to the Connecticut State Police staffing levels. The study report noted that at the time, CSP had six troopers for every sergeant. The Connecticut State Police decided to increase the ratio to eight troopers for every sergeant to more closely match the 8.35 average span of control used by PAM.

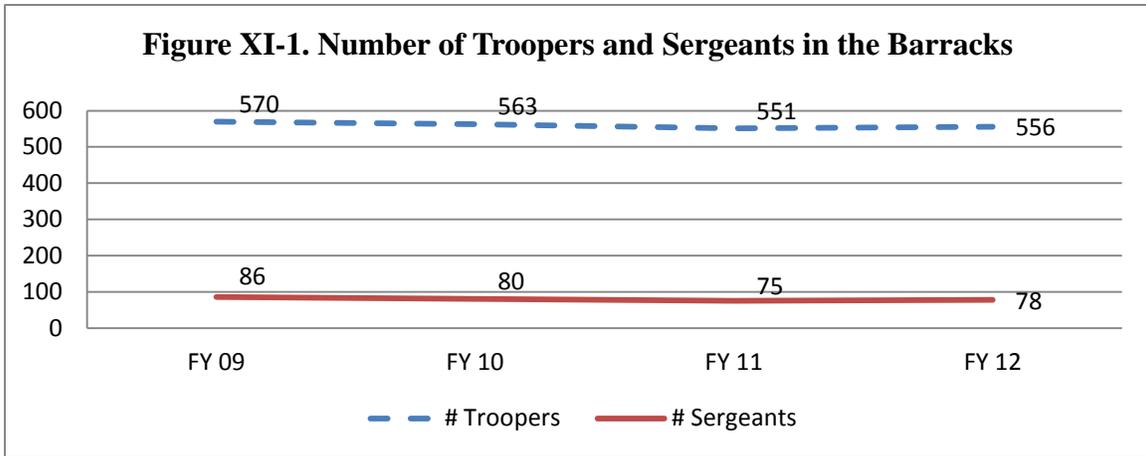
The ratio of one sergeant for every eight patrol officers is documented in the 2006 CSP Administration and Operations Manual. Under section 2.3.4 of the manual, the optimum span of control is described for routine and emergency operations:

1. Routine operations: The optimum span of control in a routine situation when sufficient planning time is available should not be more than:
 - a. One supervisor per shift or platoon (in any combination of six-eight troopers or resident troopers);
 - b. One supervisor or commander for each six-eight subordinate employees.
2. Emergency operations: The optimum span of control whenever a Minimum Control Force (MCF) is deployed during emergency operations should not be more than one supervisor for every four troopers.

Assuming a ratio of one sergeant for every eight patrol officers and resident state troopers, the following analyses were conducted using staffing data contained in CORE-CT, the state information system containing employee information on positions.

Span of Control in the Troops

The average number of troopers and sergeants in the Troops is shown in Figure XI-1 for FY 09 through FY 12. Note there were five sergeants under contract with municipalities to supervise constables, and they were excluded from the count of the number of sergeants available to supervise resident state troopers or patrol troopers.

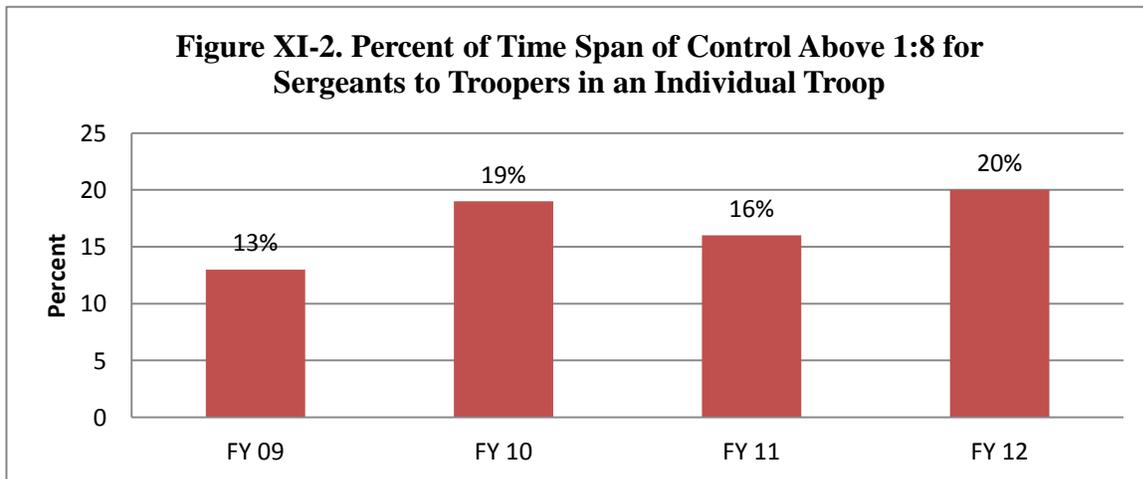


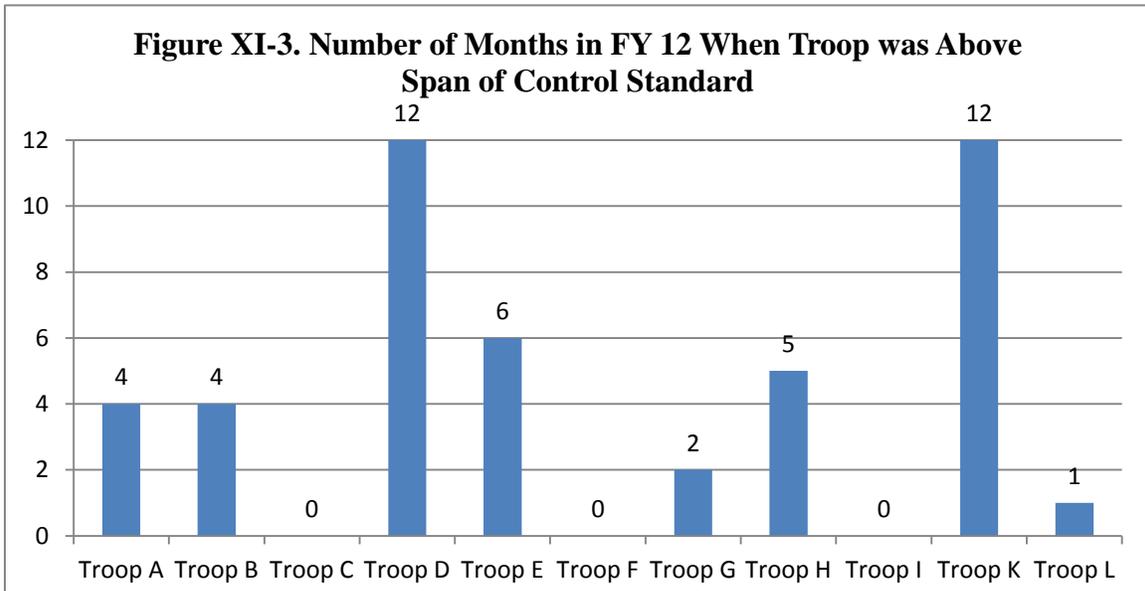
While the number of troopers across Barracks (patrol troopers and resident state troopers combined) decreased slightly by 2.4 percent, the number of sergeants in the Barracks decreased at nearly four times that rate, by approximately 9 percent.

The average number of sergeants available to supervise active patrol troopers and resident state troopers was examined. During FY 09 through FY 12, the overall ratio of troopers to sergeants in the barracks fell within the CSP guideline of six-eight troopers per sergeant, ranging from 6.6 to 7.3 annually.

The monthly staffing levels in FY 09 through FY 12 were reviewed for each individual Troop to see how many times troops were above the 1:8 span of control (Figure XI-2).

Figure XI-2 shows an increasing trend in the percent of times individual Troops were above the 1:8 guideline. For example, in FY 12, individual monthly Troop data showed the span of control above the 1:8 ratio 20 percent of the time, while for FY 09, it was 13 percent. However, span of control ratios are not uniform across all Barracks. Figure XI-3 shows the number of months in FY 12 when the troop was above the span of control guideline of 1:8.





While three troops had no months where they were above the 1:8 ratio (Troops C, F, and I), Troop D and Troop K exceeded the ratio every month. There were three months, for example, where Troop D had, on average, one sergeant supervising at least 12 troopers.

Recall from Chapter X on Shift Relief Factor, there are currently 230.57 patrols that need to be staffed across the 11 Troops. Given that 1.95 troopers are needed for each shift, there is a requirement of 449.6 active troopers. There is also an incidence of 2.3 per 100 patrol troopers on light duty, who would also require supervision. Applying the 1:8 span of control ratio to the 449.6 active duty and 10.3 light duty patrol troopers, these 460 troopers combined would require 58 sergeants to supervise them.

The 110.5 resident state troopers (who had a negligible incidence of light duty of 0.1 per 100 resident state troopers in FY 12) would also require 14 sergeants to supervise them. Together, 72 supervisors would be required to maintain a 1:8 span of control for sergeants to patrol and resident state troopers.

In FY 12, there were 78 sergeants to supervise 556 patrol and resident state troopers, a span of control of 1:7.1. With spans of control ranging from 1: 6.6 to 7.3 in FYs 09-12, there may be more of a need for reallocation of sergeants as opposed to addressing a shortage of sergeants.

Staffing Statutorily Mandated Responsibilities

Assumption: CSP needs to staff statutorily mandated responsibilities

Findings:

- Of 12 units or task forces required in statute, all were staffed by at least one sworn officer
- Staffing levels increased somewhat from FY 09 to FY 12 for the Special Licensing and Firearms Unit and Governor's Security
- Staffing levels declined from FY 09 to FY 12 for seven of the 12 units
 - The Traffic Services Unit lost the most sworn personnel (18-19 officers, or 37 percent decrease)
 - The Firearms Trafficking Task Force had the largest percent decline in sworn personnel (went from 8.6 to 2.3 officers, a 73 percent decrease)
 - Overall, staffing in these 12 units and task forces declined 26%
- CSP reported difficulty being proactive in units that have been reduced to 1-2 staff (e.g., Central Criminal Intelligence Unit, SUVCCTF, Firearms Trafficking Task Force)
- Unlike the Troops, there are no equivalent minimum staffing levels for sworn personnel in these units and task forces
- The Emergency Services Unit Bomb Squad must adhere to a minimum staffing standard set nationally by the FBI of at least two staff per team

Conclusion:

Because there are no minimum staffing level requirements for these statutorily mandated responsibilities, a single officer could technically fulfill the letter of the law

Consideration should be given to the relevancy of CSP responsibilities mandated years ago, and eliminate any from statute that are no longer necessary. Any of the mandated responsibilities considered relevant today, need to have minimum staffing level guidelines established

Beyond core patrol responsibilities, the Connecticut legislature has established 15 additional requirements for the Connecticut State Police. Details on the following statutorily required units and task forces are described in the Background chapter of this report:

1. Central Criminal Intelligence Unit (established 1967)
2. Division of Scientific Services Computer Crimes Unit
3. Fire and Explosion Investigative Unit
4. Firearms Trafficking Task Force (established 2000)
5. Gang Task Force (established 1993)
6. Governor's Security
7. Legalized Gambling Investigative Unit (function merged into the casino unit)
8. Office of Counterterrorism Intelligence Center
9. Polygraph Unit
10. Sex Offender Registry
11. Special Licensing and Firearms Unit
12. Statewide Narcotics Task Force (established 1977)
13. Statewide Organized Crime Investigative Task Force (SOCITF) (established 1973)
14. Statewide Urban Violence Cooperative Crime Control Task Force (SUVCCCTF) (established 1993)
15. Traffic Services Unit

Staffing information for 12 of these entities was available in CORE-CT (The Gang Task Force does not have a distinct code, the Legalized Gambling Investigative Unit function was merged into the Casino Unit, and the Fire and Explosion Investigative Unit was within the Division of Fire, Emergency and Building Services until FY 12).

This chapter examines FY 09 to FY 12 staffing levels for the 12 units and concludes with a discussion of national guidelines and regulations for two additional areas within the Emergency Services Unit: bomb squad and diving unit.

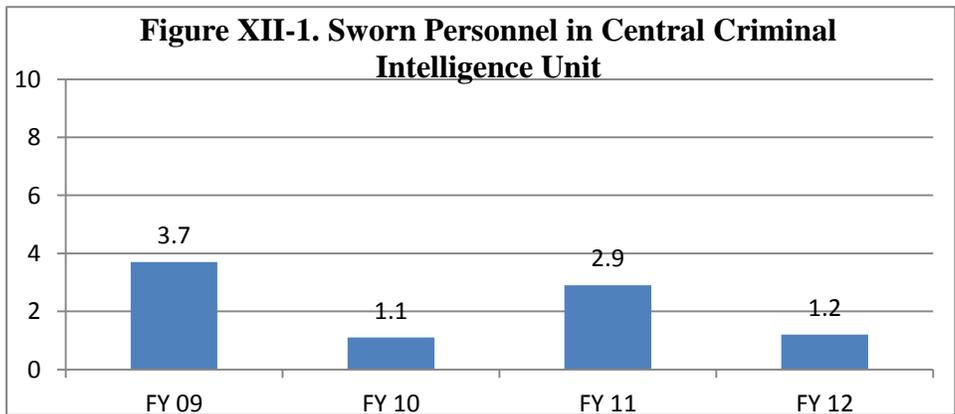
Table XII-1 shows the average number of sworn staff in the function or unit for FY 09 through FY 12. Note these figures include the average number of active and light duty sworn personnel. Comparing FY 09 with FY 12, 3-4 additional sworn personnel appear to have been added to the Governor's Security, and 2-3 to the Special Licensing and Firearms Unit. The Traffic Services Unit lost the most sworn personnel (18-19 officers) and the Firearms Trafficking Task Force had the largest percent decrease (73 percent) during this time period.

Table XII-1. Average # of Sworn Personnel for Statutorily Required CSP Functions or Units¹					
Function/Unit	FY09	FY 10	FY 11	FY 12	Change from FY 09 to FY 12
Central Criminal Intelligence Unit	3.7	1.1	2.9	1.2	-68%
Division of Scientific Services Computer Crimes Unit ²	11.7	12.9	11.6	10.9	-7%
Firearms Trafficking Task Force	8.6	4.4	3.4	2.3	-73%
Governor's Security	12.1	11.7	12.8	15.5	+28%
Office of Counterterrorism Intelligence Center	11.7	11.7	11.2	9.6	-18%
Polygraph Unit	3.6	4.0	4.0	3.8	+6%
Sex Offender Registry	6.5	5.8	5.7	6.2	-5%
Special Licensing and Firearms Unit	10.0	11.9	12.3	12.3	+23%
Statewide Narcotics Task Force/BCI-narcotics	31.5	23.8	26.4	21.8	-31%
Statewide Organized Crime Investigative Task Force (SOCITF)	7.0	5.8	5.4	4.6	-34%
Statewide Urban Violence Cooperative Crime Control Task Force (SUVCCCTF)	9.1	2.8	2.2	2.2	-76%
Traffic Services Unit	50.6	40.7	38.0	31.8	-37%
Total	166.1	136.6	135.9	122.2	-26%

¹The Fire and Explosion Investigative Unit was within the Division of Fire, Emergency and Building Services until FY 12. It had an average of four sworn officers in FY 12.
²In FY 12, there was also one sworn officer in the Forensics Unit and one in the Firearms Unit.
Source: CORE-CT.

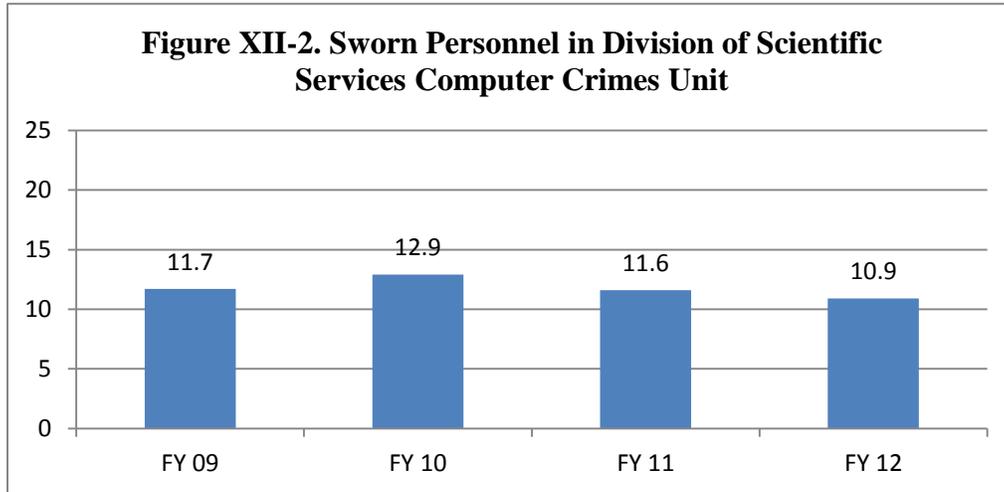
Central Criminal Intelligence Unit

Figure XII-1 shows the average number of sworn staff in the unit for FY 09 through FY 12. These figures include the average monthly number of active and light duty sworn personnel. From FY 09 to FY 12, the number of sworn personnel in the Central Criminal Intelligence Unit decreased by 68 percent.



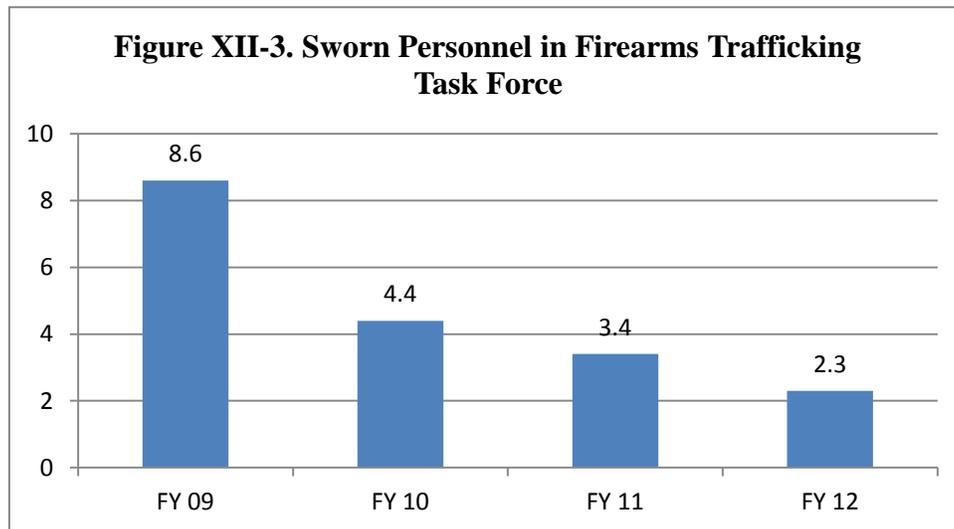
Division of Scientific Services Computer Crimes Unit

Figure XII-2 shows the average number of sworn staff in the unit for FY 09 through FY 12. The Computer Crimes Unit within the Division of Scientific Services sworn personnel ranged from approximately 11-13 during this time period.



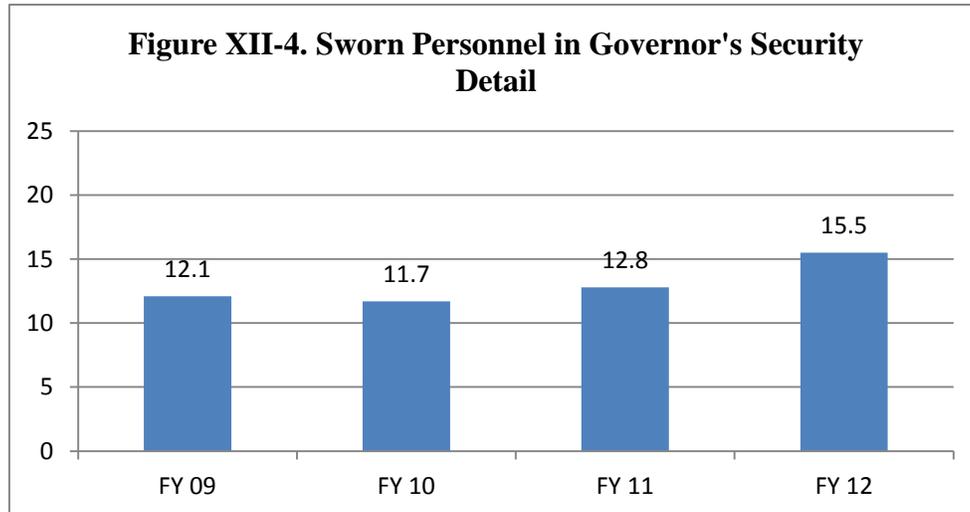
Firearms Trafficking Task Force

Figure XII-3 shows the average number of sworn staff in the unit for FY 09 through FY 12. The Firearms Trafficking Task Force decreased sharply by 73 percent during this time period.



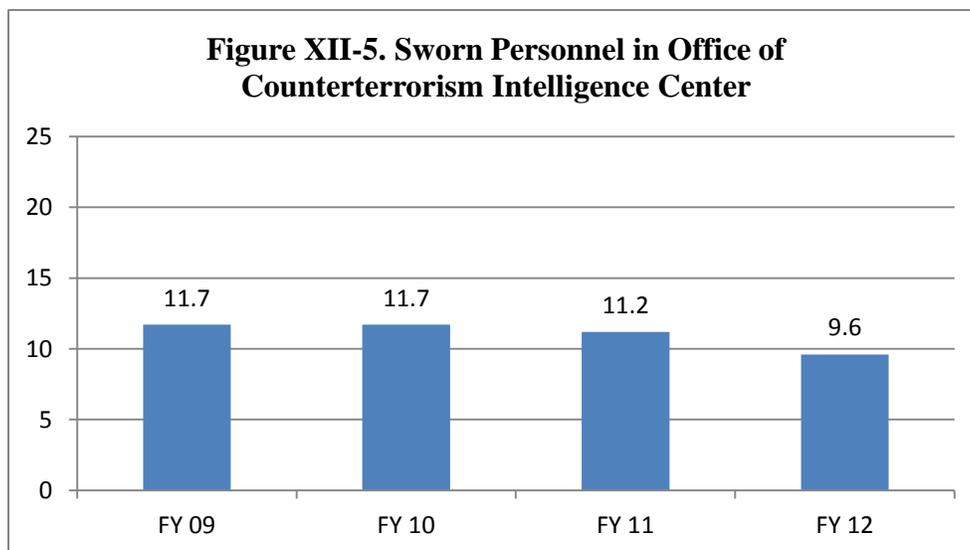
Governor's Security Detail

Figure XII-4 shows the average number of sworn staff in the unit for FY 09 through FY 12. The Governor's Security Detail increased 28 percent during this time period, with the sharpest increase seen in FY 12.



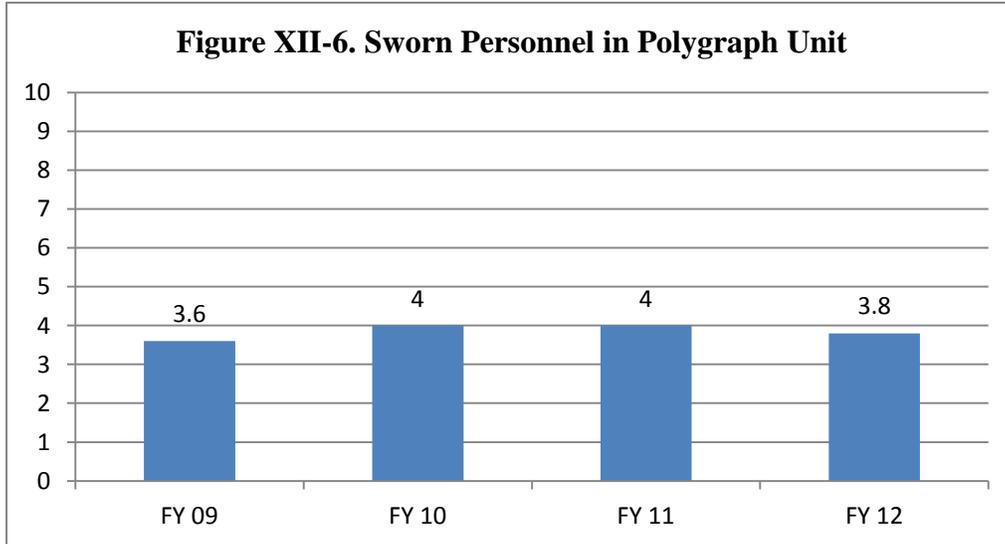
Office of Counterterrorism Intelligence Center

Figure XII-5 shows the average number of sworn staff in the unit for FY 09 through FY 12. The Office of Counterterrorism Intelligence Center had an 18 percent decrease from FY 09 to FY 12.



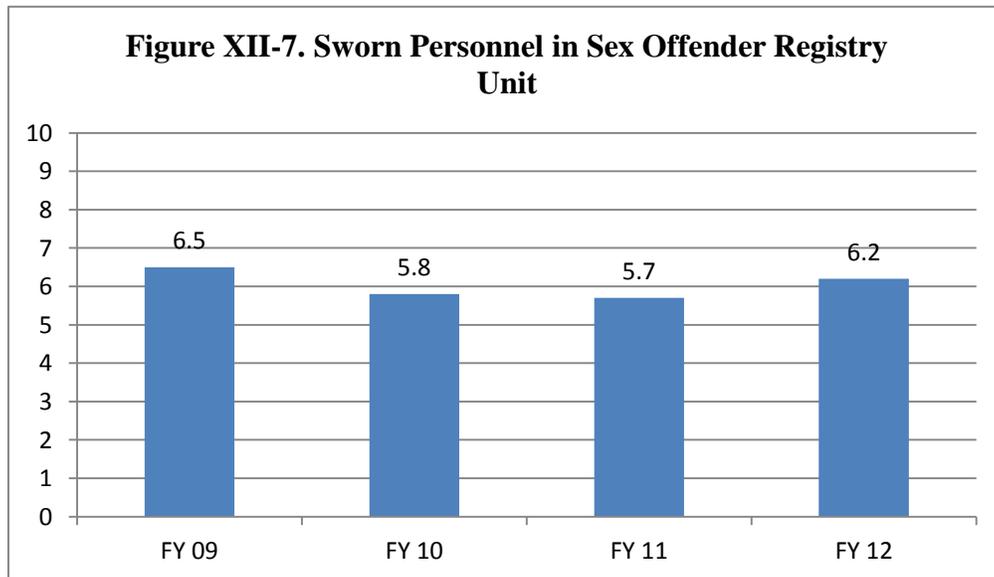
Polygraph Unit

Figure XII-6 shows the average number of sworn staff in the unit for FY 09 through FY 12. The Polygraph Unit remained steady at approximately four sworn staffing during this time period.



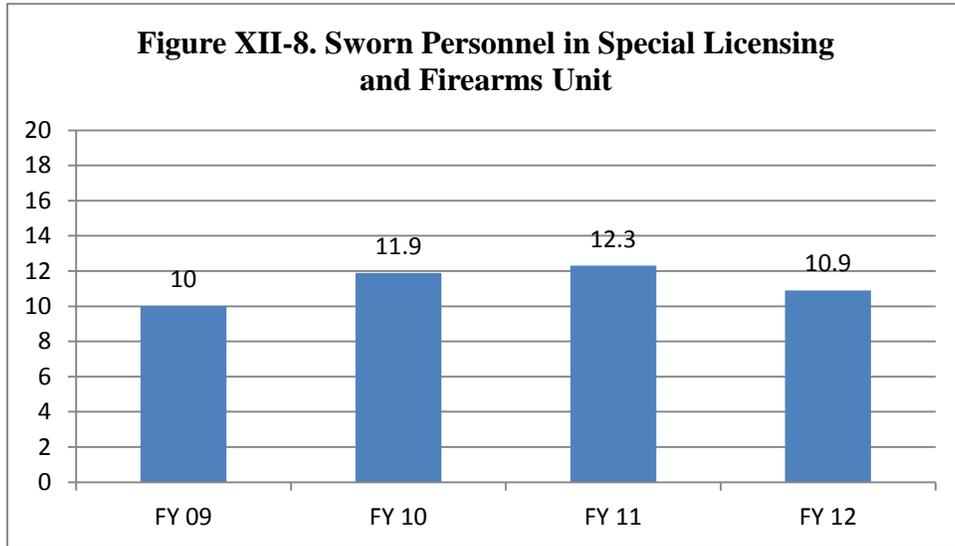
Sex Offender Registry

Figure XII-7 shows the average number of sworn staff in the unit for FY 09 through FY 12. The Sex Offender Registry Unit remained steady at approximately six sworn personnel during this time period.



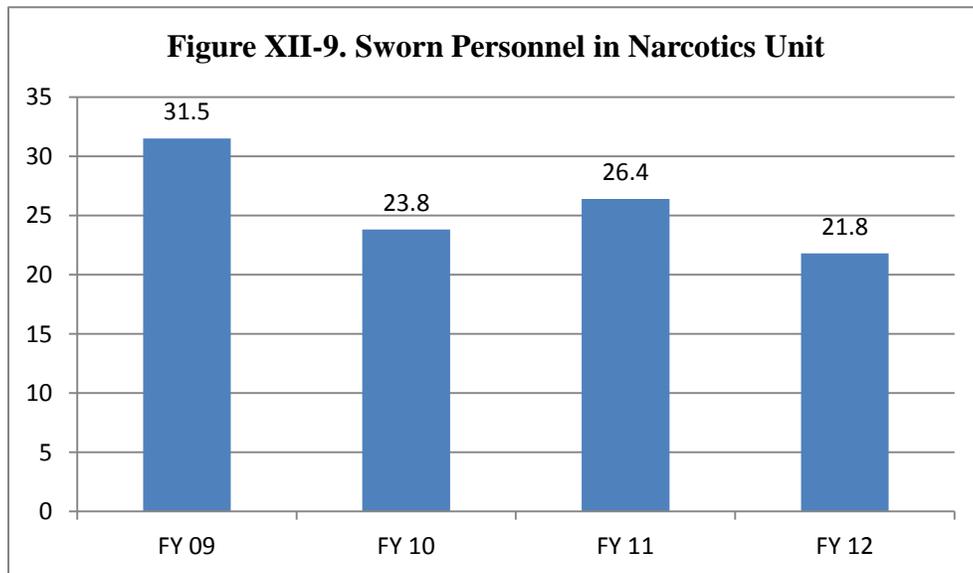
Special Licensing and Firearms Unit

Figure XII-8 shows the average number of sworn staff in the unit for FY 09 through FY 12. The Special Licensing and Firearms Unit sworn personnel increased by approximately two additional sworn personnel (23 percent) during this time period.



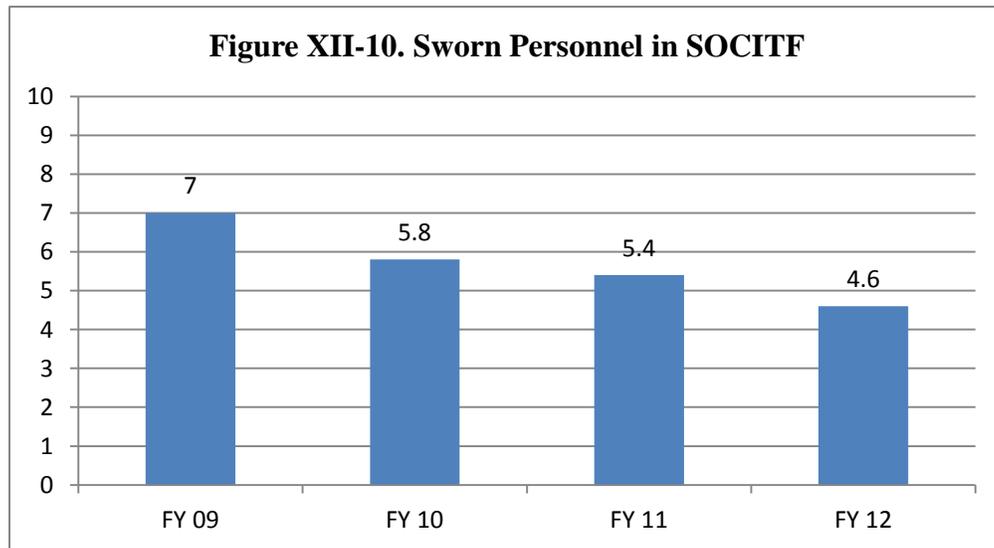
Statewide Narcotics Task Force

Figure XII-9 shows the average number of sworn staff in the BCI narcotics unit from FY 09 to FY 12. This larger unit saw a decline of nearly one-third (31 percent) in its sworn personnel.



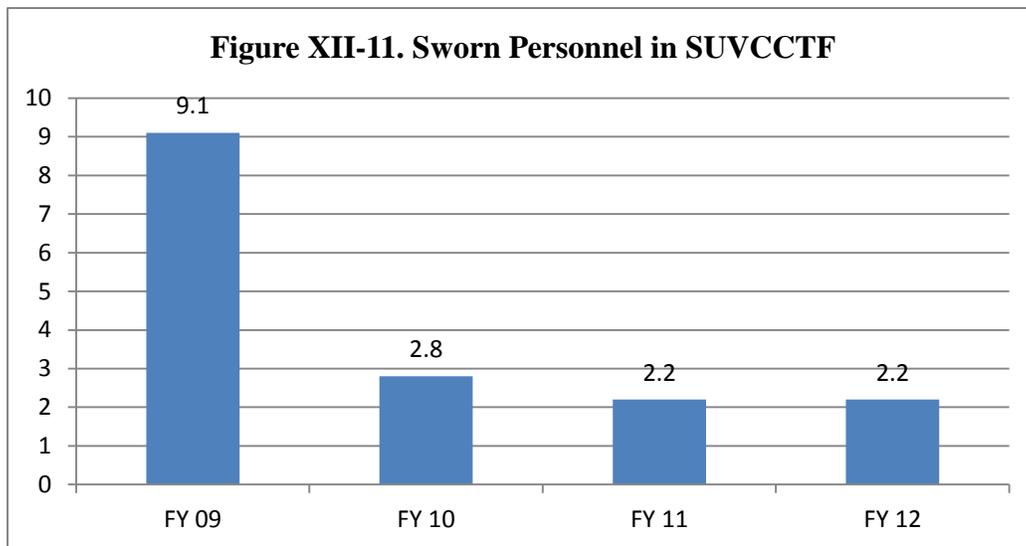
Statewide Organized Crime Investigative Task Force (SOCITF)

Figure XII-10 shows the average number of sworn staff in the unit for FY 09 through FY 12. From FY 09 to FY 12, the number of sworn personnel in SOCITF decreased by 34 percent.



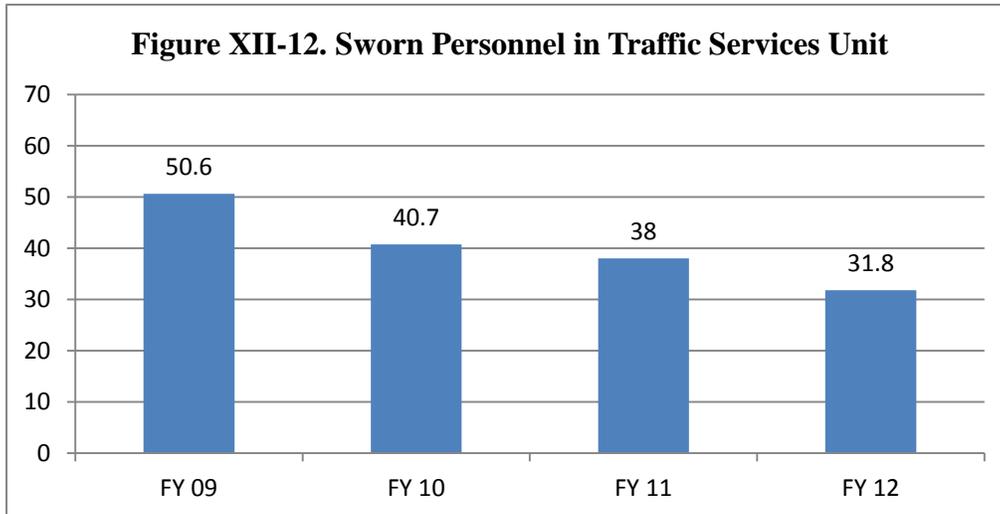
Statewide Urban Violence Cooperative Crime Control Task Force (SUVCCCTF)

Figure XII-11 shows the average number of sworn staff in the unit for FY 09 through FY 12. The task force saw a sharp decline of 76 percent in sworn personnel during this time period.



Traffic Services Unit

Figure XII-12 shows the average number of sworn staff in the unit for FY 09 through FY 12. The Traffic Services Unit decreased by 37 percent during this time period.



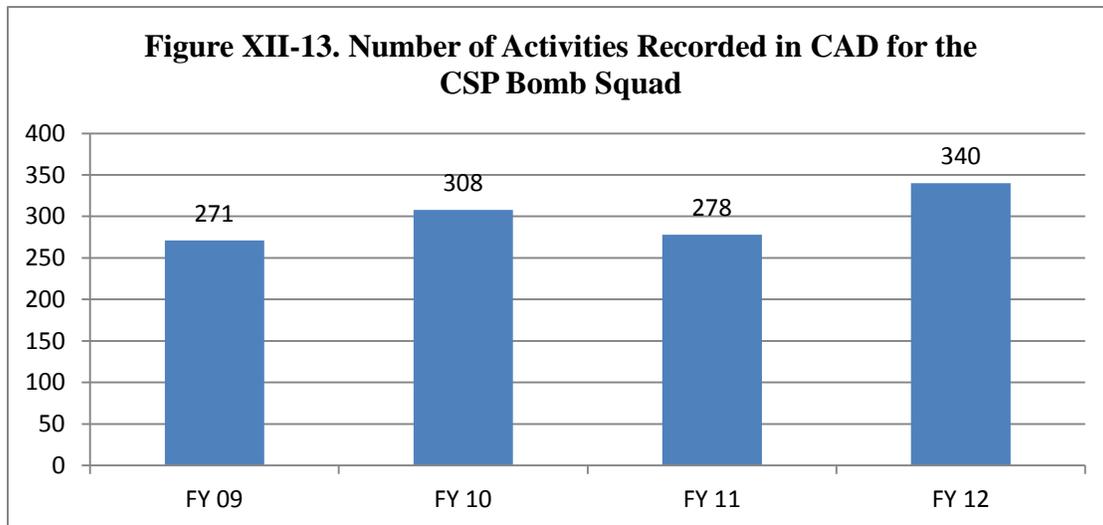
National Regulations or Guidelines Relevant to CSP

PRI staff found two instances where CSP was required to adhere to national guidelines: the bomb squad and the dive team. National requirements—including minimum staffing levels—is briefly described for the two areas.

Regulation of bomb and hazardous materials squad. Bomb Squads operate throughout the United States. The Federal Bureau of Investigations oversees and sets guidelines for Bomb Squads including a minimum of two staff per team. Should a law enforcement agency wish to form a Bomb Squad, authorization from the FBI's Special Agent Bomb Technician in the geographic area would need to be received.

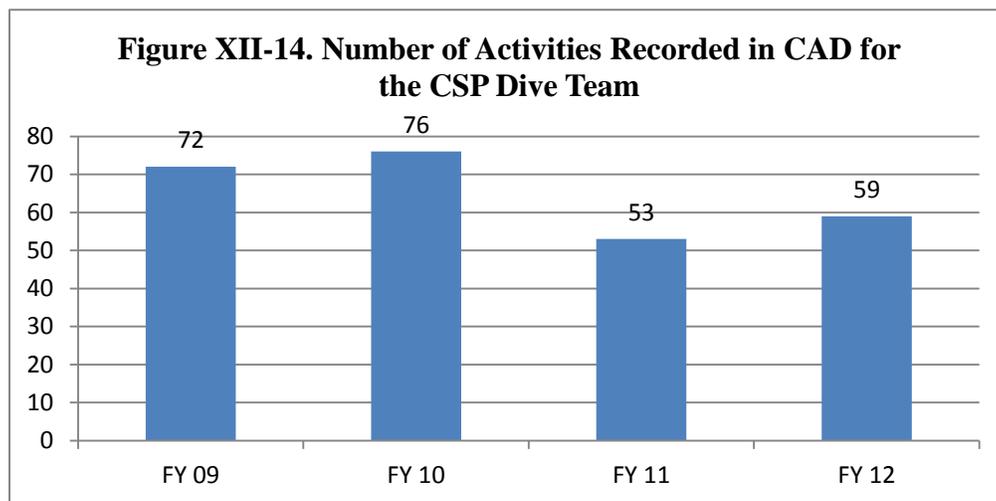
The CSP Bomb Squad covers the majority of Connecticut, and occasionally assists the other three bomb squads in the state (Hartford, Stamford, and New Haven Bomb Squads). CSP is authorized to have a maximum of 13 personnel on its Bomb Squad, and currently has nine Bomb Technicians. Due to the minimum of two staff per team, the number of sworn personnel could not go below two in order to operate.

Figure XII-13 shows the annually increasing trend in the number of times the ESU Bomb Squad had entered information into the CAD system regarding activities such as explosive recovery, technical training, building security sweep, suspicious packages, and bomb threats.



Regulation of Dive Team. The Emergency Services Unit has a Dive Team. There are three full-time and 11 part-time staff (serving in other areas of CSP). These sworn personnel were trained and certified by the U.S. Navy Dive School. The CSP Dive Team follows the regulations contained in the Navy Dive Manual. A minimum of four divers are required to be at a dive scene.

Figure XII-14 shows the relatively small annual number of times the ESU Dive Team had entered information into the CAD system regarding activities such as body recovery, evidence search or recovery, demonstrations and displays, and assist to other agencies.



Summary

The majority of statutorily required units or task forces examined had decreased sworn personnel from FY 09 to FY 12. Unlike the Troops, which have minimum staffing levels to cover patrols, there are no such equivalent minimum staffing levels for these units. CSP

personnel interviewed for this study reported difficulty being proactive in units that have been reduced to 1-2 staff. If CSP believes certain minimum staffing levels are necessary for these units to produce specified results, then CSP may wish to establish minimum staffing level guidelines. Alternatively, requirements set out in statute may no longer be necessary, and if so, should be eliminated.

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CSP Officer Safety

Theory being tested:

As staffing levels decreased, officer safety was adversely impacted

Findings:

- For 2011 and 2012, department accidents were unrelated to staffing levels
 - Less experienced officers were more likely to be in accidents and to be injured in the accidents.
 - It was suggested that increased overtime would produce more officer fatigue, and lead to more accidents; however, overtime and accidents were unrelated.
- During 2007-2011, the rate of assaults on CSP officers ranged from 8.5 to 16.9 per 100 officers, with no consistent increase or decrease in occurrence.
 - The 16.9 incidence per 100 officers for 2011, however, was the highest of the five years examined and coincided with the lowest staffing level of the five years.
- Workers' compensation leave ranged from 0.97 to 2.38 per 100 sworn personnel in Troop operations and Resident State Troopers.
 - The most recent quarter also had the highest incidence of workers' compensation.
- An indication of under-staffing would be one, rather than the required two, officers responding to domestic violence, fatal accidents, and untimely deaths.
 - 12-15% of incidents needing at least two officers did not comply with this requirement in FY 09-12, most often in situations of domestic violence.
 - Single officers responded to 18-21% of domestic violence calls occurring in Troops D and I.
 - During general patrol, officers assigned to Headquarters responded to domestic violence calls solo more than half (57%) the time.

Conclusion:

Department accidents did not increase as staffing levels decreased, but training/safety programs for newer officers may reduce their risk of accidents. The most recent information on CSP officer assaults and incidences of workers' compensation warrant future monitoring by CSP for any sustained increases.

The percent of times officers are responding solo to domestic violence and other calls requiring two officers suggests need for reinforcement of existing policies, and development of new policies on who is able to respond to domestic violence and certain other calls.

In addition to keeping the public safe, the safety of CSP sworn personnel is an important goal of the Connecticut State Police. The following measures of CSP officer safety were examined in this chapter: police cruiser department accidents, use of overtime, assaults on CSP, incidences of worker’s compensation, and adherence to two-officer minimum requirements for certain types of calls.

Department Accidents

The CSP Bureau of Professional Standards and Compliance collects information on department accidents. Beginning December 2010, the system for collecting this information became automated. In future years, CSP will have the option of monitoring trends in department accidents using this automated system.

CSP provided PRI staff with department accident data from January 1, 2011 to October 31, 2012. The analysis in this section examined the 370 department accidents for this time period including:

- date of accident;
- rank of sworn personnel;
- Troop/Unit assignment of sworn personnel;
- whether vehicle was occupied at the time of the accident;
- whether the sworn personnel was on duty or off duty at the time of the accident; and
- whether the sworn personnel was injured in the accident.

Number of department accidents. There were 213 department accidents from January-December 2011 and there were 157 department accidents from January-October 2012 (annualized to 188 for CY 2012). Figure XIII-1 shows the number of department accidents each month for CY 2011 and CY 2012. There is not a statistically significant correlation for the number of accidents that occurred in the same month of the two years.

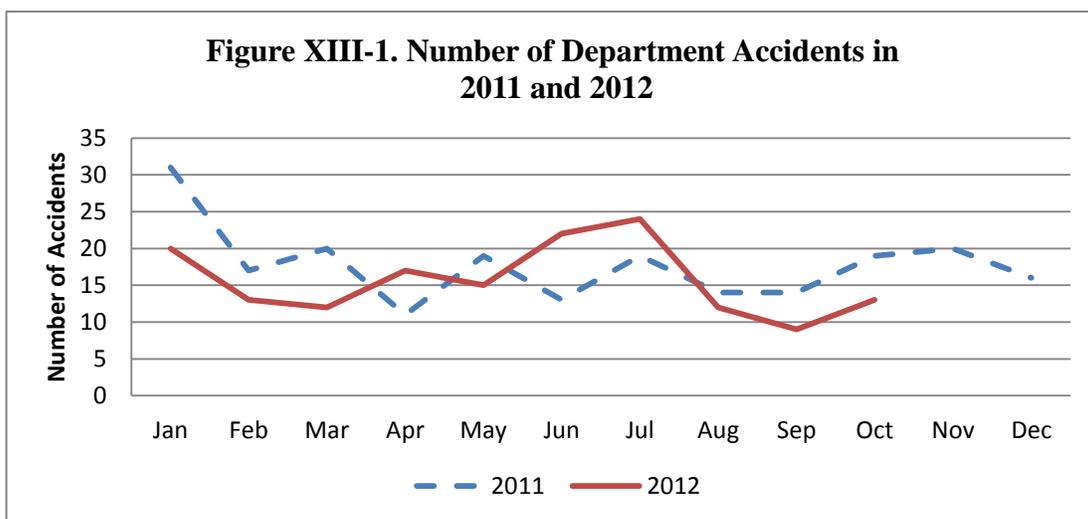
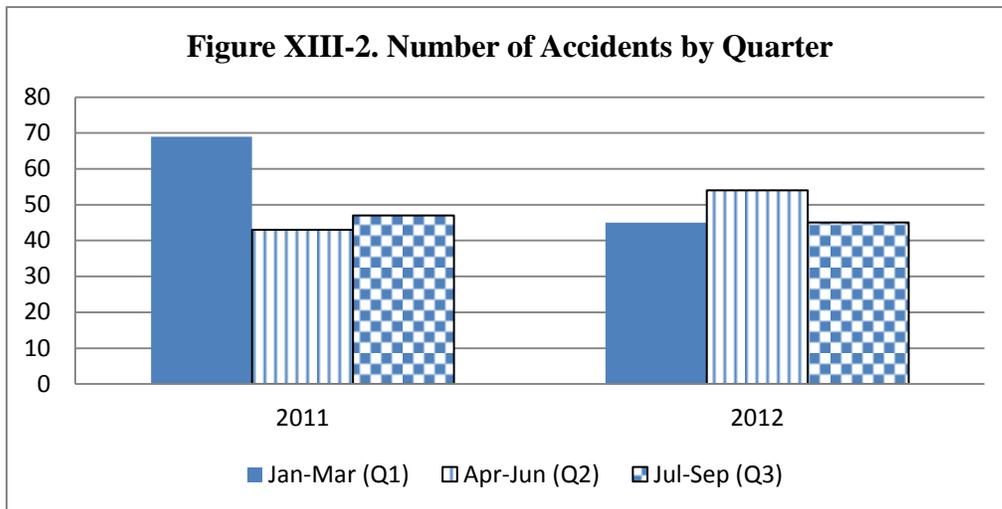


Figure XIII-2 shows the number of accidents in the first three quarters of CY 2011 and 2012. The highest number of accidents for CY 11 occurred in January-March 2011. For the first nine months of CY 2012, the highest number of department accidents occurred in April-June.

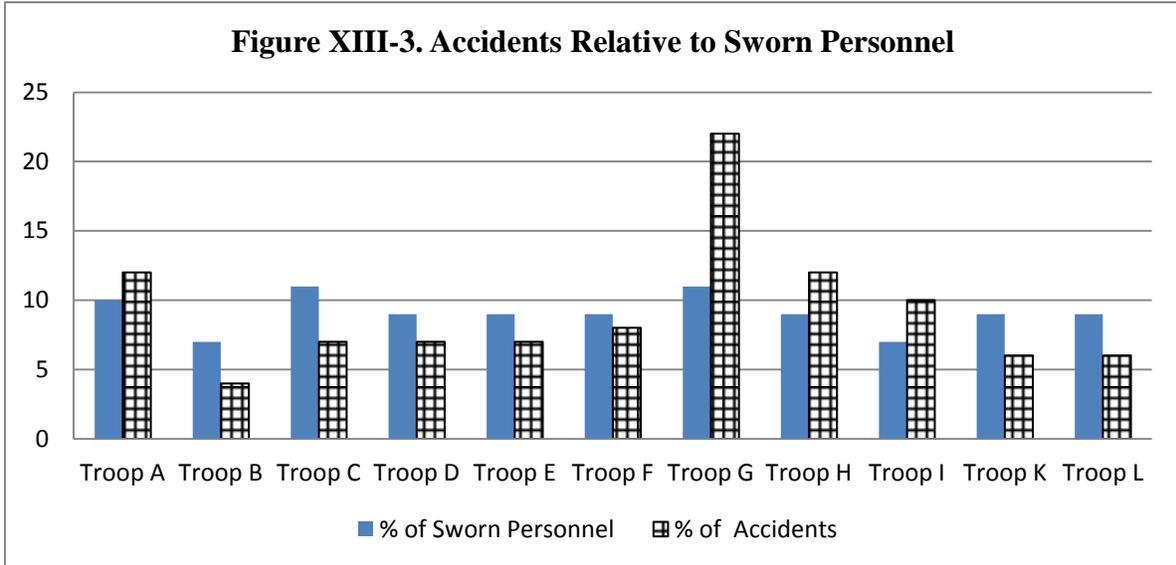


From January to September (Q1-3), there were 158 accidents in CY 2011 and 144 accidents in CY 2012, a decrease of nine percent.

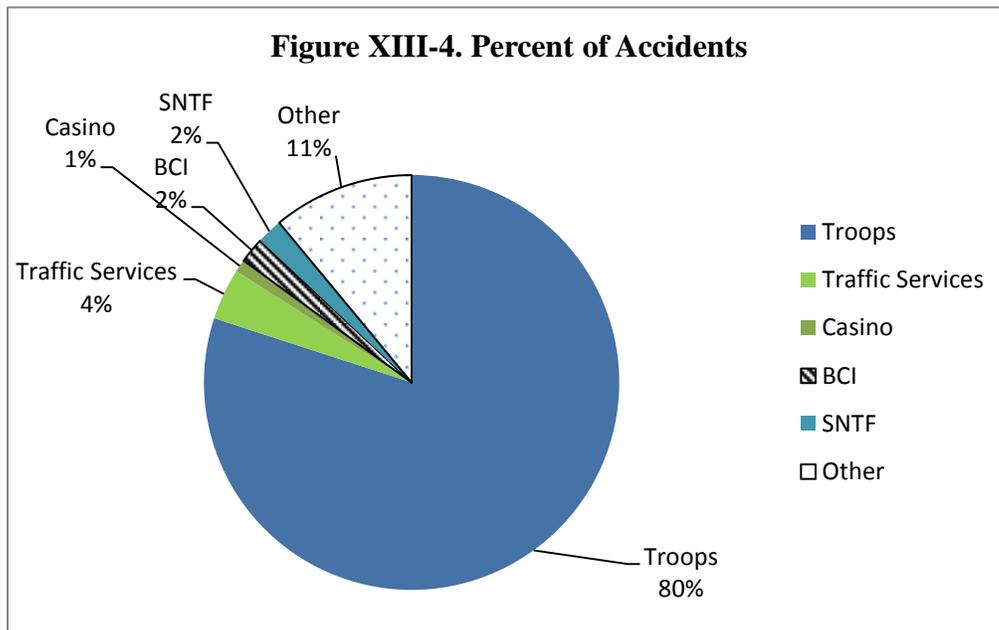
Troop or unit assignment at time of accident. Of the 370 accidents that occurred from January 2011 to October 2012, a total of 295 (80 percent) involved sworn personnel assigned to a Troop. Table XIII-1 shows the Troop the sworn personnel were assigned to at the time of the accident. Troop G, a highway patrol, had the highest percent of accidents.

Assigned Troop	Accidents	
	Number	Percent
Troop A	34	12%
Troop B	12	4%
Troop C	20	7%
Troop D	21	7%
Troop E	21	7%
Troop F	22	8%
Troop G	65	22%
Troop H	34	12%
Troop I	29	10%
Troop K	19	6%
Troop L	18	6%
Troop Total	295	101%¹
¹ Percents may not total to 100% due to rounding. Source: CSP –provided Department Accident data.		

Compared with the percent of active sworn personnel in the Troops in FY 11, Troops G, H, I and A experienced proportionately more accidents (Figure XIII-3).



There were several other units that had department accidents including Traffic Services, BCI, and SNTF; however, the bulk of accidents occurred within the Troops (Figure XIII-4).



Rank of sworn personnel at time of accident. The rank of the sworn personnel involved in department accidents is shown in Table XIII-2. Troopers, who averaged 4.4 years on the job, had more accidents than Trooper First Class personnel, who averaged 15.4 years on the job.

Table XIII-2. Number of Department Accidents by Rank of Sworn Personnel			
Rank	Department Accident		Department Percent with this Rank (in July 2011)
	Number	Percent	
Trooper	192	52%	30%
Trooper First Class	121	33%	51%
Sergeant	42	11%	15%
Lieutenant	7	2%	2%
Major	2	<1%	<1%
Master Sergeant	2	<1%	1%
Police Officer	1	<1%	<1%
Trooper Trainee	1	<1%	(varies)
Total	368	100%	100%
Note: Rank missing for two of the accidents. Source: CSP-provided Department Accident data			

Officer injury in department accidents. Three-quarters of department accidents (75 percent) occurred while the officer was on duty. Police cruisers were occupied in 286 of the 370 department accidents (85 percent of the time). Officers were injured in 53 of the department accidents (14 percent), and 45 of the 53 injuries occurred while the vehicle was occupied (85 percent of the time). Table XIII-3 shows the number of injured officers by Troop assignment. Troops A, G, D, E and H had the higher percent of Troop accidents with injuries.

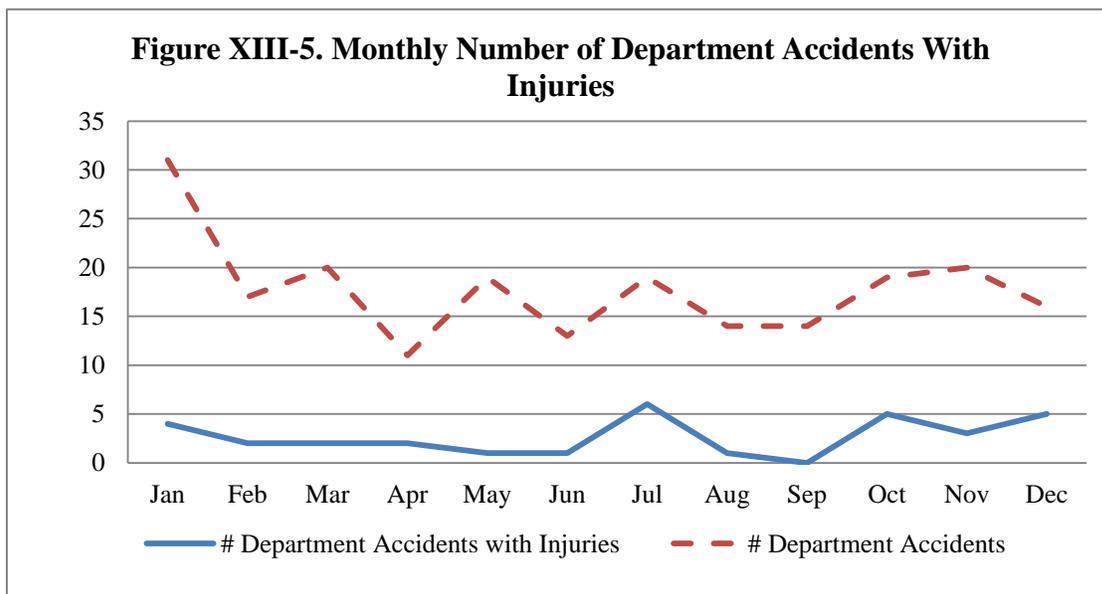
Table XIII-3. Assigned Troop at Time of Accident			
Assigned Troop	Number of Accidents With Injuries	Accidents with Injuries	
		Overall Number of Troop Accidents	Percent of Troop Accidents With Injuries
Troop A	10	34	29%
Troop B	1	12	8%
Troop C	1	20	5%
Troop D	4	21	19%
Troop E	4	21	19%
Troop F	2	22	9%
Troop G	13	65	20%
Troop H	6	34	18%
Troop I	4	29	14%
Troop K	1	19	5%
Troop L	2	18	11%
Troop Total	48	295	16%
Source: CSP-provided Department Accident data			

Table XIII-4 shows that officers in the rank of Trooper had, not only a greater likelihood of being in a department accident, but also of being injured.

Table XIII-4. Number of Department Accidents With Injuries by Rank of Sworn Personnel			
Rank	Number of Accidents With Injuries	Overall Number in Rank Having Accidents	Percent of Rank Accidents With Injuries
Trooper	34	192	18%
Trooper First Class	12	121	10%
Sergeant	6	42	14%
Lieutenant	1	7	14%
Major	0	2	0%
Master Sergeant	0	2	0%
Police Officer	0	1	0%
Trooper Trainee	0	1	0%
Total	53	368	14%

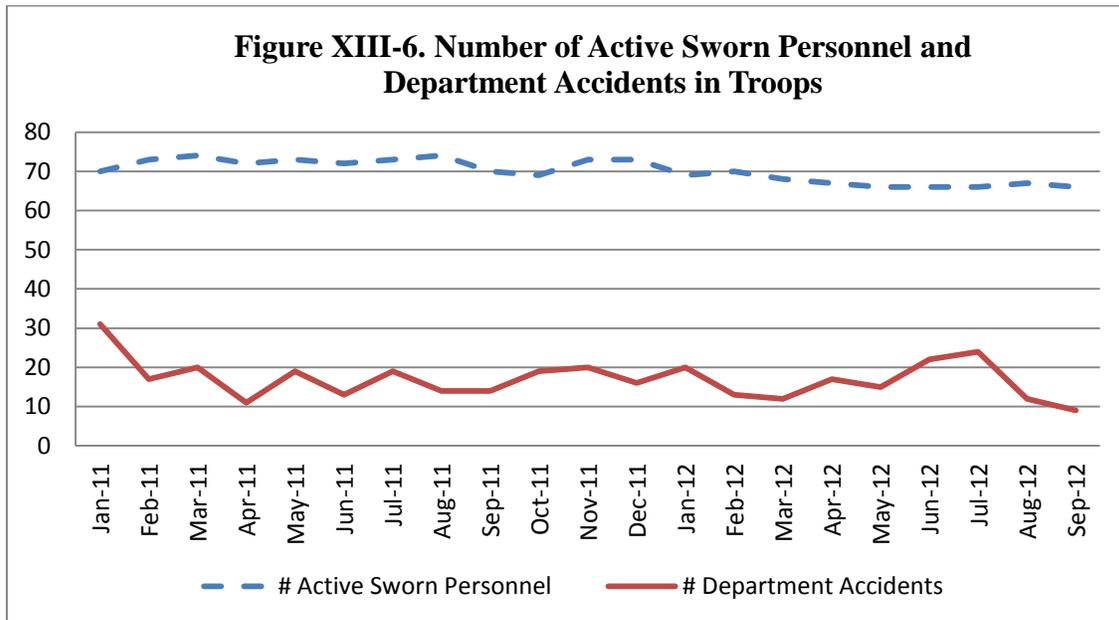
Note: Rank missing for two of the accidents.
Source: CSP-provided Department Accident data

Figure XIII-5 shows the number of injured officers by time of year for CY 2011, the one full year of data PRI had for this analysis. Despite the higher number of department accidents in the winter month of January, the greatest percent of department accidents with injuries occurred in July, a summertime month.

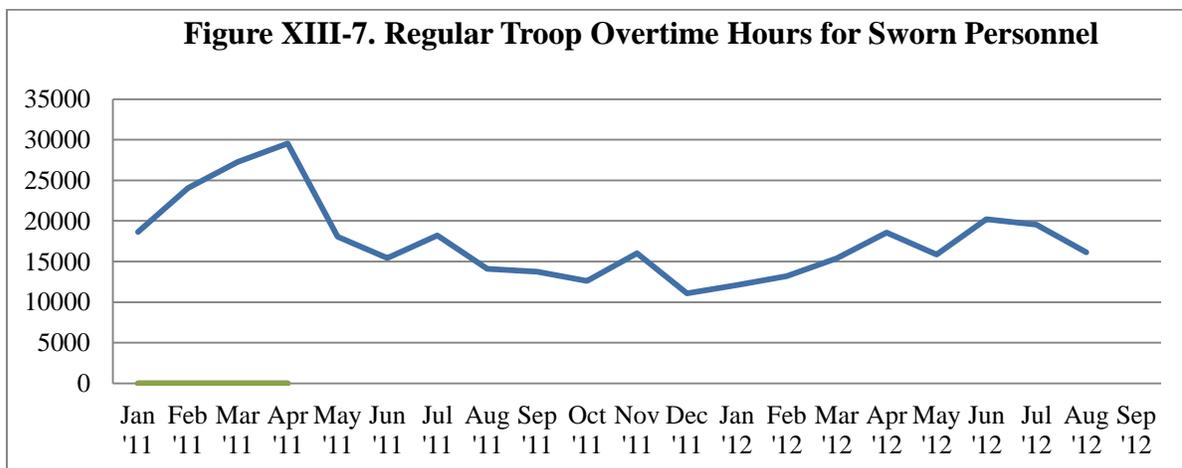


CSP Department Accidents and Staffing Levels

The possible relationship between department accidents and staffing levels was examined. It is possible that lower staffing levels might result in overworked personnel, leading to a higher incidence of department accidents. Figure XIII-6 shows the number of active sworn personnel and the number of department accidents. There is not a statistically significant correlation between department accidents and staffing level.



CSP Department Accidents and Overtime. It has been suggested that overtime may contribute to fatigue and result in more department accidents. Figure XIII-7 shows the regular overtime hours for sworn personnel in the Troops. Comparing this information with Figure XIII-6, the spikes in department accidents that occurred in January 2011, and to a lesser degree in July 2012, do not coincide with spikes in regular overtime. The greatest number of overtime hours during this time period occurred in the Spring of 2011, in April and May.



Assaults on CSP

Annually, data is collected and submitted to the national UCR program on assaults on Connecticut State Police. Table XIII-5 shows the number of assaults from CY 2007 to CY 2011. While it is certainly unfortunate to have any assaults occur, there does not appear to be an increasing trend in the percent of such incidences, or in the percent resulting in personal injury. However, the 16.9 assault rate per 100 officers is the highest of the five years, and future annual rates should continue to be monitored for any increases.

Table XIII-5. Number of Assaults on Connecticut State Police					
	2007	2008	2009	2010	2011
Number of Assaults	150	190	120	93	171
Number with Personal Injury	46	53	36	25	35
Percent with Personal Injury	31%	28%	30%	27%	20%
Avg # Active Sworn Personnel in FY		1,152	1,174	1,094	1,013
# Assaults per 100 officers		16.5	10.2	8.5	16.9

Figure XIII-8 shows a decreasing trend in number of sworn personnel and a cyclical pattern of assaults on CSP sworn personnel. As noted above, however, future annual rates should continue to be monitored for any sustained increases.

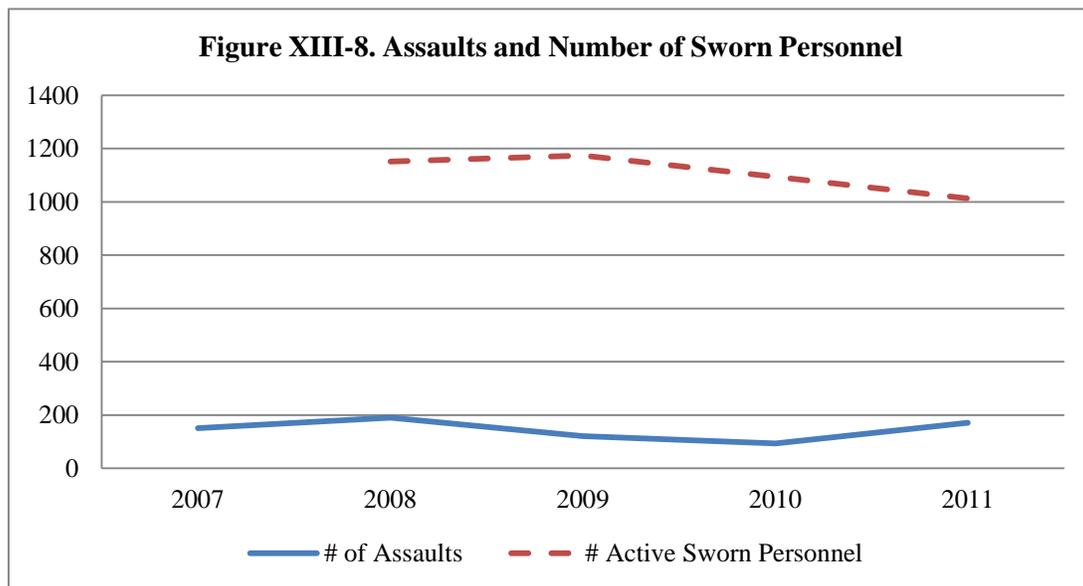
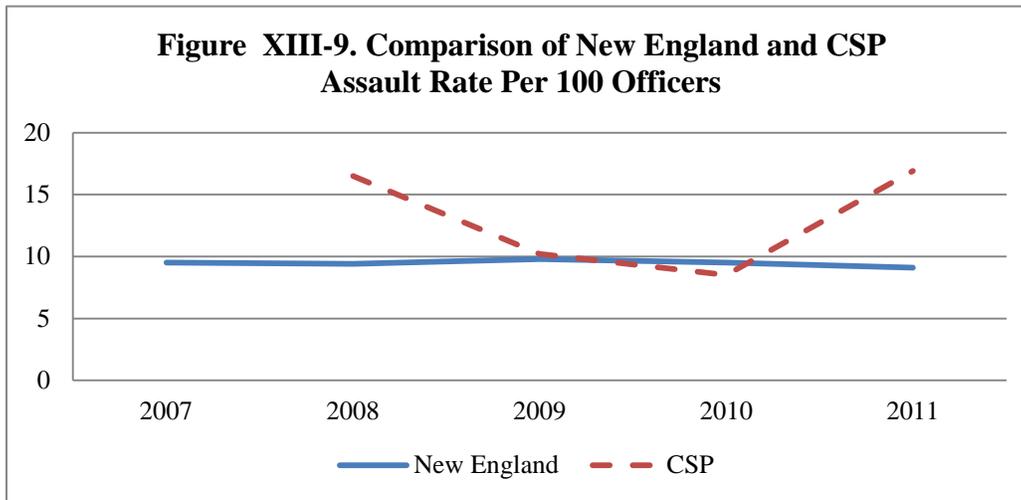


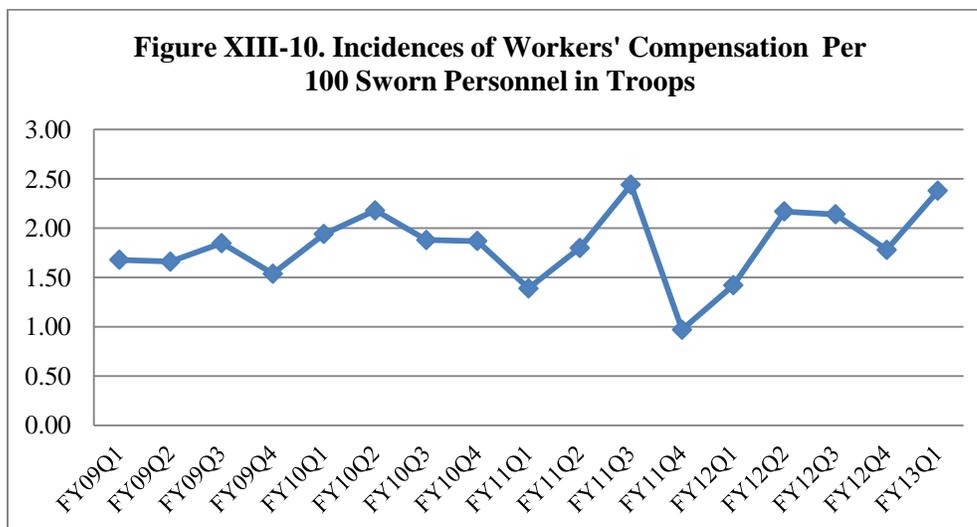
Figure XIII-9 shows the large fluctuation in CSP assault rate per 100 officers compared with the relatively stable rate for all New England police departments reporting this information to UCR.



Incidence of Worker’s Compensation

One measure of safety of sworn personnel is frequency of occurrence of workers’ compensation. Workers’ compensation leave is only given to personnel who have been injured on the job. If incidences of workers’ compensation increased when staffing levels decreased, this would suggest that sworn personnel safety is adversely affected by decreases in staffing levels.

Figure XIII-10 shows the incidences of workers’ compensation per 100 sworn personnel in the Troop operations and Resident State Trooper program. In the first quarter of FY 09, there was an average of 1.68 incidences of workers’ compensation per 100 sworn personnel. The rate ranged from a high of 2.38 in the first quarter of FY 13 to a low of 0.97 in the fourth quarter of FY 11.



Similar to the recommendation to monitor assault rates on CSP sworn personnel, workers' compensation rates should also be monitored, particularly given the most recent data show the highest workers' compensation rate since July-September 2008.

Calls Requiring at Least Two Officers

In the CSP Administration & Operations (A&O) Manual, the following are situations requiring at least two officers to be present:

- Domestic violence situations (sec. 19.3.17.c)
- Fatal accidents (initial response requires patrol trooper and his/her supervisor) (sec. 17.1.5.d)
- CARS unit (accident reconstruction, not patrol or emergency unit) (sec. 17.1.5.d.7)
- Untimely death/homicide (requires trooper and his/her supervisor) (sec. 9.1.2.c)

Additionally, while not explicitly stated in the A&O Manual, troopers are required to have at least two officers present for potentially hazardous incidents, and incidents of deadly force involving an officer.

The CAD data system contains information both on the type of incidents troopers are responding to and the number of troopers responding to the incident. Relevant to three of the five situations requiring at least two officers, there are incident categories for: domestic violence, fatal accidents, and untimely death/homicide. The number of troopers responding to an incident can be categorized as a single officer or two plus (i.e., multiple) officers.

An indication of under-staffing in patrol troops would be single rather than multiple troopers responding to such situations. CAD data on FY 09 through FY 12 incidents were analyzed for frequency of single officers responding to calls requiring at least two officers. In general, 85-88 percent of incidents needing at least two officers complied with this requirement in FY 09-FY 12 (Figure XIII-11). Approximately 12-15 percent of such incidents consistently did not comply with this requirement.

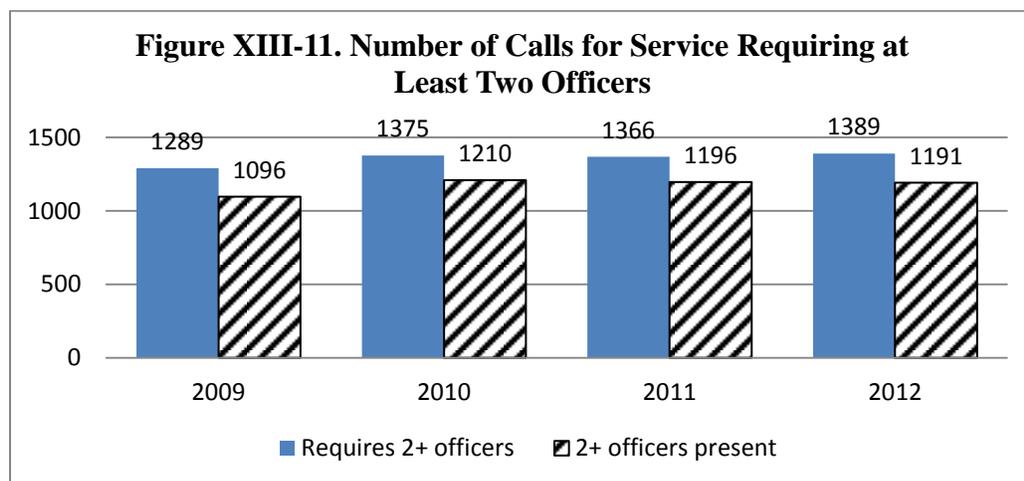
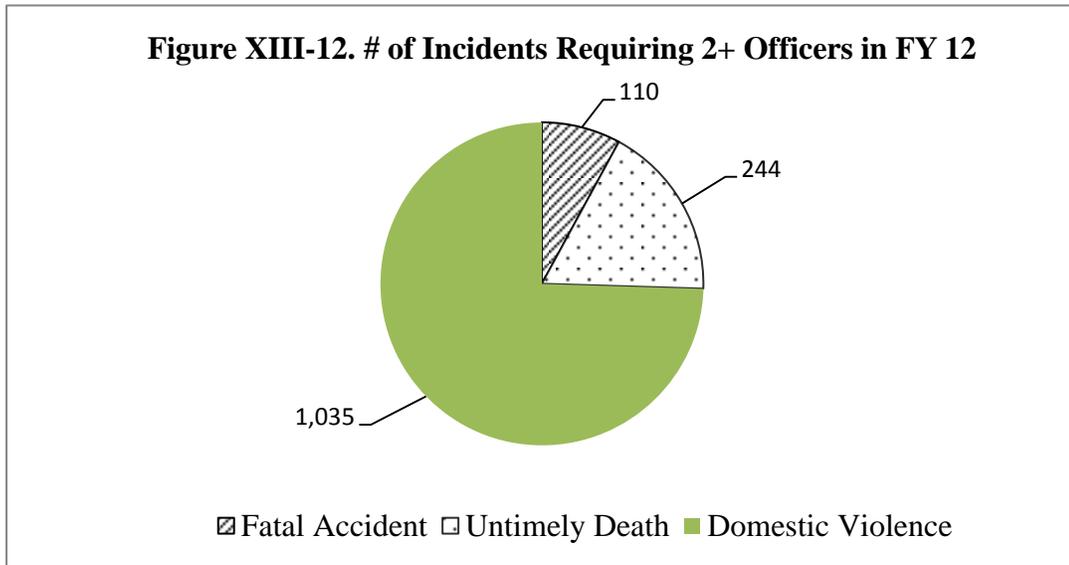


Figure XIII-12 shows the types of cases requiring at least two officers that occurred in FY 12. Of the 1,389 incidents requiring at least two officers, many related to domestic violence (74 percent). A similar pattern was found for FYs 09-11.



Differences Across Troops

Domestic violence incidences did not occur at the same rate for all Troops. Figure XIII-13 shows the number of incidences of domestic violence responded to by each Troop in FY 12 compared with all incidences. Troop D and Troop K handled a greater number of domestic violence incidences than other Troops, such as Troop G, which is considered primarily a highway patrol Troop. Combined, Troops D and K handled approximately 41 percent of all CSP domestic violence incidents.

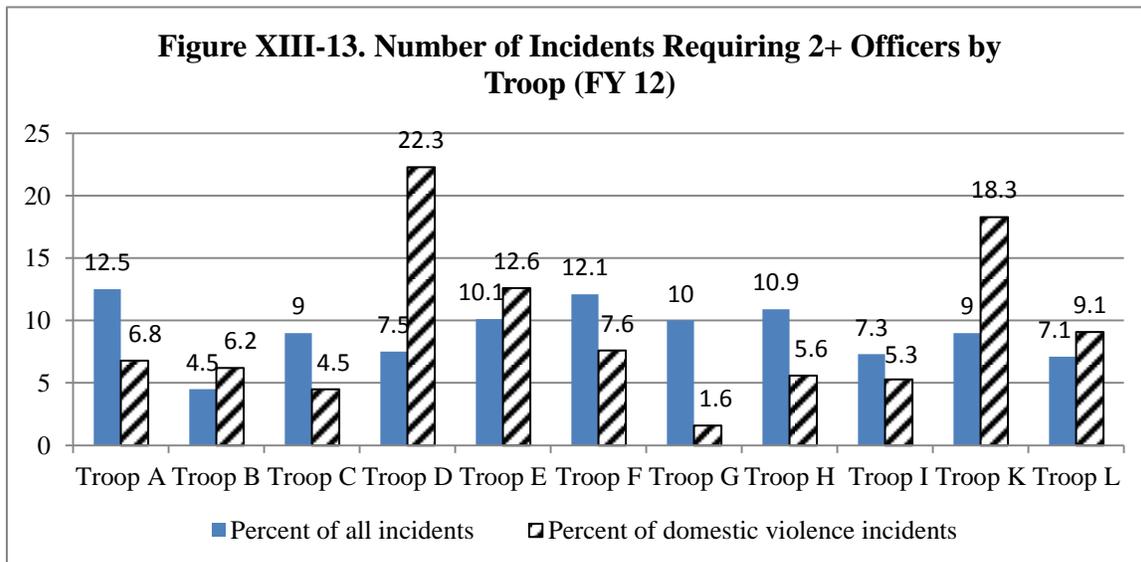


Table XIII-6 shows the Troops in order of most to least domestic violence calls handled by a single trooper (In addition to these 858 calls, there were also 143 additional calls handled by sworn personnel either responding from multiple Troops, or not assigned to one of these Troops). Although Troop D had the highest incidence of domestic violence calls, Troop D also had the third lowest percent of compliance with the requirement of at least two officers responding to the call. Almost one in five domestic violence incidences were handled by a single patrol trooper in Troop D.

While it may be impossible for two or more troopers to respond to every domestic violence incident 100 percent of the time, a lack of adherence to this requirement 18-21 percent of the time in a particular troop—as is occurring in Troops I and D--suggests an understaffing of patrol troopers and increases an officer’s risk for injury. Additionally, less than half the domestic violence calls responded to by sworn personnel in Headquarters had the requisite two officers. This finding suggests a policy may need to be developed regarding who is available to respond to domestic violence calls.

Table XIII-6. FY 12 Incidences of Domestic Violence and Number of Officers Responding to Call		
Troop	Percent of Domestic Violence Calls Responded to By 2+ Officers	Incidences of Domestic Violence
G	69%	14
I	79%	45
D	82%	190
A	86%	55
C	86%	39
K	87%	160
H	88%	46
B	91%	55
E	94%	107
L	94%	80
F	97%	67
Headquarters	43%	74

Source: CSP CAD Data.

Technology

The application of technology has improved policing in several ways over time. Officers now have a variety of items available to them that aid in protecting themselves and the public they serve. The state police have no centralized technology unit within the department. However, there are several units that coordinate to procure and maintain technologies for the sworn and civilian members located at the troops and within several specialized units.

The CAD/RMS Field Technology Unit is the primary unit responsible for obtaining technology for the patrol function. The unit has several ongoing projects it balances with servicing, updating, and management of existing equipment. There is currently no formal strategic plan in place for the procurement of technology in the division however, the unit makes efforts to prioritize and implement technology with the idea of the department's mission in mind.

The application of technology has improved policing in several ways over time. For example, law enforcement strategy-motorized preventative patrol and rapid response to calls for service-was developed decades ago in response to the invention of the automobile and two-way radio.⁷⁷ More recent technological innovations, such as DNA testing and information technology, have also impacted how policing is conducted as agencies across the country use these advancements in everyday police functions.

It is difficult to generalize how technology affects law enforcement agencies because the challenges that one department or unit faces may not be the same for another. One study conducted by the Police Executive Research Forum states, however, that the incorporation of technology in today's society creates great potential for enhancing police work. Specifically, the study notes, technology may strengthen crime control by:

- improving the ability of police to identify and monitor offenders, particularly repeat offenders;
- facilitating the identification of places and conditions that contribute disproportionately to crime;
- speeding the detection of and response to crimes;
- enhancing evidence collection;
- improving police deployment strategy;
- creating organizational efficiencies that put officers in the field for longer periods of time;
- enhancing communication between police and citizens; and

⁷⁷ Police Executive Research Forum, (2009). *Law Enforcement Technology Needs Assessment: Future Technologies to Address the Operational Needs of Law Enforcement*.

- strengthening the ability of law enforcement to deal with technologically sophisticated forms of crime (e.g. identity theft, cybercrime) and terrorism.⁷⁸

In this section of the report, PRI staff presents issues related to police technology examined throughout the course of the study which were not developed into formal recommendations. While these areas of observation are not fully developed below due to time constraints, staff considers them noteworthy. These areas may be considered by the department as action worthy or in need of further study and thus, suggested improvements have been included where appropriate.

Given the vast array of technology available to law enforcement agencies and associated costs, amidst limited resources; it is important to identify what is available to an agency, determine where its needs are, and prioritize those needs before purchasing items. PRI staff found while there is informal discussion among the various units within CSP, there is no formal strategic plan that guides decision-making for technology acquisition or post-procurement. Furthermore, because technology can often quickly become obsolete; PRI staff found no replacement schedule which would ensure CSP is adequately equipped and current in its technologies.

Types of Technology Available and Used By Law Enforcement

Technology can be categorized by types and purposes served. One study separates technology, as it relates to policing, into two areas: hard and soft innovations.⁷⁹⁸⁰ Another study conducted by the Police Executive Research Forum, uses broad categories to describe technology related to police work. While most of the section is focused on contemporary technology, the technologies identified and described below are intended to show broad categories, not an exhaustive list of what is specifically needed by or available to law enforcement agencies across the country and the Connecticut State Police.

- *Information technology.* Today, computers are used to maintain a wide array of data. Through the improvement of technology, police now have the ability to collect, manage, and analyze large quantities of data. Police agencies are using computers to store electronic data, including information on incident reports, calls for service, stolen property and traffic citations. Also, agencies equip their officers with mobile data terminals (MDT's), or laptops, which allow officers to access various data systems from the field.

⁷⁸ I.d. pg 10

⁷⁹ Byrne, James., & Marx, Gary. (2011) Technological Innovations in Crime Prevention and Policing. A Review of the Research on Implementation and Impact. *Technology led policing: Journal of Police Studies*. Vol 2011-3

⁸⁰ Hard innovations are new materials, devices, and equipment that can be used either to commit crime or prevent and control crime (cameras, metal detectors, less-than lethal force devices, new police protective gear). Soft technologies involve the strategic use of information to prevent crime and to improve the performance of the police (predictive policing and recording /video streaming capabilities in police vehicles)

- *Communication and dispatch.* Nearly all of the nation's police agencies participate in 9-1-1 emergency telephone report systems and utilize a computer aided dispatch (CAD) system to manage calls and minimize response times.
- *Identification and investigation.* There have been several advances and tools to aid in criminal investigations. As of 2003, 60 percent of police agencies employing nearly 90 percent of all officers had access to Automated Fingerprint Identification Systems (AFIS). DNA testing is one tool that has become a common method of identifying suspects involved in sex crimes and other violent offenses using his or her unique genetic blueprint. Advancements in the automation of criminal records, integration of databases, in-field computer access, and sophisticated crime analysis and investigative software, have facilitated the ability to identify and ultimately apprehend suspects. One additional item to aid in the investigation process is the increased use of GPS (Global Positioning Satellite) to track vehicle location of law enforcement officers and suspects.
- *Surveillance and sensors.* Stand-alone and networked video cameras provide police the ability to monitor high-risk locations, roadways, and interactions between officers and the public. Also, GPS can be included in this category because it allows agencies to track suspects and stolen vehicles. Another tool that has been widespread is Automated License Plate Readers (ALPR), which automatically scan the license plates of motor vehicles and check them against databases containing stolen car information and other vehicle records.
- *Weapons and tactical equipment.* In addition to traditional weaponry, there are several devices that police have available for tactical uses, some of which include: special surveillance equipment, aerial surveillance equipment, ballistic shields, specialized armored vehicles, and robots for disposal of explosives and hazardous materials. Since the 1970s police have increasingly sought advanced non-lethal weapons to replace or complement traditional weapons such as batons, firearms, tear gas, and chemical agents. The most common of these devices is the Taser, which incapacitates suspects through pain compliance or electro-muscular disruption.

Training in use of new technology. It is important to provide staff training in the use of new technology to keep their knowledge and skills current on these innovations. Moreover, training of officers can now include computer driven, interactive simulation training systems which simulate various conditions that an officer might face in the field.

Impact of technology. Today, the number of technologies in use and available for law enforcement continues to grow, however, the impact of technology on police effectiveness may be limited. This limitation may stem from several sources including: technical (engineering) problems; difficulty in using the technology; ancillary costs associated with using the technology (costs associated with training, technical assistance, and maintenance); unanticipated effects on organizations, officers or citizens; and the prevalence of the problem(s) the technology is

intended to address.⁸¹ However, with proper research, selection, and implementation of technology, agencies can avoid several of the drawbacks mentioned above when purchasing new technologies.

The impact and cost-effectiveness can be determined for some technologies. For instance, technologies that are designed to improve everyday operations may be easier to assess than technologies intended to address low-probability, high impact events,⁸² like an earthquake or terrorist attack. Additionally, the effectiveness of one technology may be dependent on the availability of other complementary technologies within an agency. Moreover, technological advancements in the hardware used by officers, such as protective gear, weapons, and surveillance capabilities can serve to reduce injuries and deaths to officers, suspects, and bystanders. It is important to note there have been very few scientific studies dedicated to technology's impact on policing, and only a small number of controlled pre- and post-evaluations of implementation.

Technology and the Connecticut State Police

As mentioned in a previous section, there are three components to the Division of State Police: Office of Field Technology, Office of Administrative Services, and Professional Standards and Compliance. Each of these areas is comprised of several units, bureaus, and functions that utilize technology in their everyday duties. Additionally, there are units in other areas of DESPP, which also make use of various technologies for their respective job functions.

For all technology purchases within the division of state police, individual units similarly identify, research, and procure technologies for their personnel. Each unit seeking new technologies works closely with the grants office under DESPP to go through appropriate channels for securing such items. Variation in the process of procuring technology across the agency is due primarily to the unique requests and needs of the individual units. Virtually all of the units within the division rely on grant funding to procure needed items, rather than having a dedicated funding source within the state's general fund.

Currently, the state police have no centralized office for managing technology needs for the department. The department, as part of its strategic plan and annual goal reporting for year 2012-2013, identified short term goals and strategies using technology in order to enhance administrative and business functions, however, these goals do not encompass all technologies or areas affected by technology.

The Field Technology CAD/RMS/GIS Unit, under the Office of Administrative Services (OAS), is the primary unit responsible for identifying, researching, and procuring technologies for troopers in the field, as it relates to the patrol function under OFO. This unit is described in full detail below.

⁸¹Koper, Christopher S., Taylor, Bruce G., & Kubu, Bruce E. (2009) Law Enforcement Technology Needs Assessment: Future Technologies to Address the Operational Needs of Law Enforcement, *Police Executive Research Forum*. pg.19.

⁸² I.d. pg 20.

CAD /RMS Field Technology Unit. The CAD/RMS Field Technology Unit identifies, researches, and obtains mobile technologies required by commanding staff at the Troops and for troopers on the road. The CAD/RMS Training and Implementation portion of the unit is responsible for the management of the computer aided dispatch (CAD) and report management system (RMS)⁸³ utilized by all sworn DESPP personnel.⁸⁴ Additionally, the staff within this subset is responsible for diagnosing and troubleshooting existing equipment, performing repairs, and providing help desk support for the officers in the field.⁸⁵ Again, while there is no centralized technology office, the field technology in conjunction with the computer services and fleet units, meets on a regular basis to discuss the acquisition and management of technology across the division.

Technology in other units of the division. As mentioned above, the Field Technology unit is responsible for securing and updating technology primarily for the patrol function under OFO within the division. Other units within the state police seeking specialized equipment or technologies typically identify, research, and request these items separate from the Field Technology unit. Like field technology, other units seeking grant funding go through the department's grants unit to submit applications and item requests. These units are also competing for both internal and external funding, and prioritize based on the need of the officers and personnel in the unit.

Current field technology unit initiatives. The technologies state police are using in the field touch several aspects of police work as well as outside and partnering agencies. The unit has a list of approximately twenty items that it is working on at a given time. These projects are prioritized based on the ability to obtain funding, direction of the administration, and need in the field. Several ongoing projects are listed in below:

- *Connecticut Impaired Driver Records Information System (CIDRIS)* when fully operational is intended to be the state's clearing house for all Operating Under the Influence (OUI) cases. This system will provide an automated exchange of OUI arrest data and documents among local law enforcement, Department of Emergency Services and Public Protection, Department of Motor Vehicle, Division of Criminal Justice and the Judicial Branch Superior Court Operations Division.
- *Model Minimum Uniform Crash Criteria (MMUCC)* is a program funded by the National Highway Traffic Safety Administration (NHTSA) and jointly managed by the Governors Highway Safety Association will change the PR-1⁸⁶ and how the Division investigates traffic collisions.

⁸³ Report Management System (RMS) provides officers with the ability to complete and electronically submit reports to their supervisors, negating the necessity to bring them into the troops.

⁸⁴ Connecticut State Police Staffing Analysis - CAD/RMS Field Technology Unit

⁸⁵ The unit is subject to compliance with several sections of the A&O Manual including chapters 2,6,7,9,12 and 13. These chapters cover the care and use of the department equipment, the facilities, communications (radio, COLLECT, Prawn), records management, and field reporting.

⁸⁶ The PR-1 is a form filled out when an accident occurs but there is no fatality.

- *University of Connecticut Crash Data Repository (CDR)* is a system, with support from the Department of Transportation that will allow law enforcement agencies capturing PR-1 crash data to submit the information electronically to a central repository developed by UCONN. The purpose of the repository is to provide various stakeholders with timely, accurate, and uniform crash data in the state. The CDR will enable users to query, analyze, print, and export the data for research and informational purposes.
- *E-Citation printers* are portable devices that automate the process of issuing citations and transmit captured data to the central infraction bureau. The acquisition of the new e-citation printers has allowed officers in the field to decrease the time it takes to issue a ticket. Prior to the e-ticket printers, officers would write a ticket by hand which increased the time it took to clear a given call for service. Having the e-printers decreases the amount of time an officer is out of their vehicle which could influence trooper safety, especially during peak commuting hours or when the stop is on a roadway with narrow shoulders. Currently, there are 139 e-citation printers in the field. The unit is working on a grant to purchase additional machines and spare parts to have on reserve. Since 2010, there have been 74,640 e-citation tickets issued for an approximate projected fines total of \$15,772,160. The goal of the program is to acquire enough printers to assign one to each patrol officer.⁸⁷

Other projects in the unit, at varying phases of completion, include:

- Automated License Plate Reader (ALPR);
- electronic signature;
- electronic case management;
- national missing and unidentified persons system (NAMUS); and
- trouble tickets.⁸⁸

While staff in the field technology unit is currently managing projects mentioned above, they are having difficulty meeting the time requirements and goals outlined within the agency's strategic plan.⁸⁹ This is, as indicated by the unit, due to stretched staff resources; with three (2 sworn and 1 civilian) staff in the unit. It should be noted that some projects the unit is responsible for are in collaboration with other agencies' outside of DESPP (e.g. CIDRIS). These projects are in varying phases of completion and are dependent on the time it takes to resolve issues or make necessary adjustments on the part of all collaborating agencies.

Technology at troops. Each troop maintains an inventory of all technology items at the troop, the number of each item, and which items are signed out to the officers full-time or during their shifts. This list does not indicate what technology should be available to the troop or officers, nor was any such standard found within CSP or nationally.

⁸⁷ Connecticut State Police Staffing Analysis - CAD/RMS Field Technology Unit

⁸⁸ The unit is responsible for diagnosing and troubleshooting existing equipment, performing repairs and providing help desk type support for over 900 Troopers in the field. This function of the unit is not provided on a 24/7 basis at this point in time.

⁸⁹ Connecticut State Police Staffing Analysis - CAD/RMS Field Technology Unit

As part of understanding technology that primarily affects the patrol function of the state police, PRI staff, through coordination with the field technology unit supervisor, sent a series of identical questions to each of the eleven Troops. The set of questions were to be distributed by the Troop Commander to the officers at each of the troops. These questions asked about:

- how current technology is used at the troops;
- technology recommendations for a highway vs. rural troop;
- technologies available but not currently available at the troops and why; and
- which items should be priority, as it related to trooper and public safety.

Of the eleven troops across the state, seven responded to staff questions regarding technology. The responding troops consisted of one solely highway troop, four primarily rural troops and two troops that have a mix of both characteristics. Responding troops had similar thoughts in their recommendations for equipment available to both highway and rural troops. This included thermal imaging cameras and tint meters for rural troops, and additional e-printers, lo-jack, and portable breath test devices for highway troops. Additionally, every troop indicated budgetary constraints as the primary reason new or updated technologies are not currently available to them. Table XIV-1. lists several technologies that troops identified as currently available at the barracks and needed technology that would assist in achieving a higher level of trooper and public safety. It is important to note, there are some items on the list which, while located at the troop, every officer at the barracks may not have been issued the item.

Table XIV-1. Technologies identified by Troops as needed and currently available*	
Technologies currently available at troops**	Needed Technologies to achieve higher trooper/public safety
<ul style="list-style-type: none"> • E-citation printer • Mobile data terminals • Mobile video recording cameras • Lo-jack • Mobile radio system • Laser and radar detectors • Commercial truck enforcement printers (where applicable) • Digital cameras • Automated Fingerprint Identification System (AFIS) • VASCAR • Tint meter • Portable radio system • Radiation detectors • Personal GPS • Intoxilyzer 	<ul style="list-style-type: none"> • E-citation printer • RMS reader (software) • Thermal imaging cameras • GPS devices for tracking dogs • License Plate Readers (LPR) • AEDS • Night vision goggles • Tint meters • Decibel level meters • Portable scales (where applicable) • Recessed lighting in cruisers • Additional digital cameras • Ability for field down/upload of scene photos • VASCAR • Portable breath tests • Alcohol screening mag-lite flashlights • AWD vehicles • Total station scene mapping equipment
<p>*Four troops did not respond to PRI staff questions. **Some of these technologies may be part of the field technology unit’s current procurement efforts. Source: Connecticut State Police Troops</p>	

Cost of technology. While there are significant benefits to adopting new technologies there are also costs associated with such purchases, including costs associated with hardware, software, training support, and maintenance. Additionally, because there is a limited pool of resources to purchase items, these funds are highly competitive. Often to make technology gains in one unit, there is a tradeoff of not updating or purchasing new items in other units. The CSP has performed a few formal analyses of the costs and benefits of various technology improvements. One example includes License Plate Readers that it is currently in the process of securing.⁹⁰

The Field Technology Unit, like other units competing for funds in the division, has no line item budget for upgrading or procuring new technologies. Each unit supervisor seeks out grant funding and also works to maintain funds for existing resources. However, the Field Technology Unit, like others has experienced the effects of decreased federal grants available for the procurement of technology. PRI staff requested annual expenditures for technology by CSP, and such figures were provided however, due to time constraints were not completely analyzed. This reported decrease in funds in an already competitive environment means additional planning and prioritizing is necessary to ensure the most effective use of limited funding. In addition, several grants the unit applies for have stipulations associated with them that further complicate planning efforts. For example, some grants specify what the agency can and cannot purchase with the funds, others have timeframes associated with them, and in all cases the department must justify the need of the technology they are trying to obtain. Some grants also require a state match, such as an 80/20 split. There are however, grants that the department does not apply for because of associated requirements or the grant does not meet the agency's needs.

Strategic plan. The unit has not performed a formal comprehensive needs assessment of which technologies could be employed by the CSP to enhance public safety or developed a strategic plan specific for technology, which establishes acquisition priorities related to the goals of the CSP. Currently, the unit, like others within the division has some knowledge of the technological needs of the officers and units it serves. Specifically, the Field Technology Unit is aware of devices that are outdated or in need of repair, specifically, MDTs, and other complementary items (e.g. MDT trays). The unit tries to address these requests in a timely manner. Again, while there is direction within the unit, there is no formal written plan for the unit to act as a guide for future acquisition when funds become available.

The unit has documents identifying priorities and initiatives for addressing them, but do not include measurable goals and comprehensive strategies for achieving these priorities. Additionally, understanding this is a dynamic field, steps should be taken to develop a maintenance and replacement schedule so that existing technologies are updated or transitioned to a new technology on a rotating schedule. Staff understands this is difficult to complete, given that once technology is purchased under a grant, maintenance or licenses for the item may only be covered for the life of the grant. Therefore, the agency must plan how to budget for ongoing costs once this occurs.

⁹⁰ This analysis compared ELSAG license plate readers to Vigilant readers. The evaluation determined ESLAG had a higher degree of accuracy and provided the best solution for the agency's short and long term objectives.

The unit is in a unique position where the needs and priorities of the field and administration change respectively from year to year. Additionally, competing priorities at both the state and federal level, challenges the acquisition and the ability to fund future costs on a daily basis. Ultimately, with proper planning and the correct implementation of a product, technology has the capability to enhance police work. PRI staff believes having a formal plan for this area will benefit CSP and serve as foundation which can be adjusted as personnel, priorities and available resources change over time.

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Civilianization

Another charge from the legislature to PRI as it developed recommended staffing standards was to consider the staffing of Division of State Police positions which do not require the exercise of police powers. To the extent, sworn state police officers are working in positions that do not require sworn personnel, there are opportunities for increasing state patrol resources through their reassignment and potential short or long term cost-savings based on civilian replacements in those positions.

In summary, over time the department has reviewed and civilianized a number of positions that were once held by sworn officers. Units civilianized under the department's current effort include: Legal Affairs; Public Information Office; Special Licensing and Firearms Unit; State Police Bureau of Identification; and Fingerprinting Unit. Additional areas reviewed by PRI staff included: Computer Crimes Unit; Fire Explosion Investigation Unit; Polygraph Unit; and Sex Offender Registry. While there may be certain functions within positions in these units and elsewhere at CSP that could be performed by a civilian, often these positions also include functions that require a sworn officer, making the benefits of civilianization less clear. Based on interviews at the units PRI staff reviewed, sworn officers are necessary to complete many functions carried out by the units.

Civilianization is an ongoing initiative of the department, which may periodically reassess how functions are carried out to ensure that the skill and training of sworn officers are used to their fullest.

In this section of the report, PRI staff presents issues related civilianization examined throughout the course of the study which were not developed into formal recommendations. While these areas of observation are not fully developed below due to time constraints, staff considers them noteworthy. These areas may be considered by the department as action worthy or in need of further study and thus, suggested improvements have been included where appropriate.

Background. Civilianization has been defined as a law enforcement agency's hiring of non-sworn personnel to replace or supplement its sworn personnel.⁹¹ Thus it can involve changing a position previously held by a sworn officer to being filled by a civilian, or creating a new position in a law enforcement agency that from the start will be filled by a civilian. The concept of civilianization in law enforcement dates back to the 1950s and gained interest throughout the 1970s. The role of civilian staff in law enforcement for several decades had been limited to clerical or secretarial positions, maintenance, jail security or booking tasks, and motor

⁹¹ Office of Community Oriented Policing, *The Impact of the Economic Downturn on American Police Agencies.*, U.S. Department of Justice. October 2011.

pool assignments.⁹² Over time, support has grown for the use of civilians in law enforcement by several groups.

For instance, a 1967 report by the President’s Commission on Law Enforcement and the Administration of Justice emphasized the use of civilians specifically in certain roles, noting that “[c]ommunications, records, information retrieval, research and planning, and lab analysis, could be performed better by civilians with specialized training than by sworn law enforcement officers.”⁹³ Additionally, a 1973 report by the National Advisory Commission on Criminal Justice Standards and Goals suggested that: “every police agency should assign civilian personnel to positions that do not require the exercise of police authority or the application of the special knowledge, skills and aptitudes of the professional police officer.”⁹⁴

More recent, the International Association of Chiefs of Police (IACP) established a Model Policy on Civilianization that identifies a number of functions as civilian responsibilities, which are displayed in Table XV-1.

Table XV-1. IACP Model Policy on Civilianization: Civilian responsibilities	
<ul style="list-style-type: none"> • Planning and research • Parking enforcement • Media relations • School crossing control • Communications • Accident investigation • Records • Legal affairs 	<ul style="list-style-type: none"> • Animal control • Fleet maintenance • Property/evidence • Detention • Victim advocacy • Forensics • Police auxiliary/reserve⁹⁵

Some of the benefits cited from using civilians in certain positions in law enforcement agencies include: the refocus of sworn resources on sworn duties, potential cost savings, and the integration of technical/specialized skill into the agency not possessed by sworn personnel. An issue raised about civilianization is that some of the functions which can be handled by non-sworn personnel are also positions that law enforcement agencies have used for their sworn personnel on light duty at any given time.⁹⁶

Civilianization of positions within the Division of State Police. Determining the appropriate mix of sworn and civilian staff poses a challenge for a law enforcement agency and will be based on its needs, structure, and growth. Most recently, for more than a year, the state

⁹² Alfred I. Schwartz. Alease M. Vaugh et.al. *Employing Civilians 'for 'Police Work, an Urban Institute Study* (Washington, DC, U. S. Government Printing Office, 1975,) p. vii.

⁹³ President's Commission on Law Enforcement and Administration of Justice. (1967). *The Challenge of Crime In A Free Society Washington, DC U.S. Government Printing Office*, p. 108."

⁹⁴ The National Advisory Commission on Criminal Justice Standards and Goals. (1973). *Report on Police Washington, DC U.S. Government Printing Office*, p. 258.

⁹⁵ City of San Jose, California, Office of the City Auditor, “Audit of Civilianization Opportunities in the San Jose Police Department,” January 2010, Appendix D, accessed October 11, 2012.

⁹⁶ According to the Connecticut State Police Bargaining Agreement: “ In each fiscal year of this contract, a minimum of twenty-seven positions or the numerical equivalent of three percent (3.0%) of the bargaining unit, whichever is greater, shall be designated as light duty positions.” Article 16 Fitness for Duty and Light Duty Sec. II(b).

police have been evaluating areas where sworn personnel are not performing hazardous duty work within their daily job functions. The department's objective is not to unnecessarily remove sworn officers from positions that require the expertise of a law enforcement authority. Rather, in order to meet the goal to reassign sworn officers back on the road, the department, as part of its multi-year plan, is evaluating the actual number of sworn personnel needed to perform the job duties/responsibilities in units across the agency.

As of January 1, 2013, there were a total of 1,304 personnel within the Division of State Police of which, 1,039 (80%) were sworn officers⁹⁷, and 265 (20%) were civilians. Forty additional sworn officers work in other parts of DESPP, along with 268 more civilian personnel.

There have been discussions and initiatives to civilianize throughout the department's history; however, there have been no prior efforts that approached the magnitude of current efforts. The following sections discuss the areas identified by the state police for civilianization, and several additional units selected by committee staff for review in regards to civilianization. A description of the department's consolidation of the dispatch function has already been provided in chapter I.

Clearly the functions and responsibilities for many units within the Division of State Police need to be performed by law enforcement officers, specifically, in areas where training, expertise, arrest powers and on-the-job investigative experience of sworn personnel are needed. However, per the state police, certain positions or aspects of positions currently filled with sworn personnel in several division units possibly could be performed by civilians with the appropriate or additional training,

Earlier, the background section described the structure of the Division of State Police, and noted that the Division may be broken down into three main areas: OFO, OAS and Bureau of Professional Standards. OFO is where the core patrol and criminal investigations functions are located, and include the specialized investigation units under the Bureau of Criminal Investigations, the Emergency Services Unit, and the Traffic Services Unit. All of these units have a mix of civilian and sworn, but there are some units which are not directly related to the patrol function, but may work in support of patrol, and are units that the question of civilianization can be raised about. Some areas the CSP have already assessed and acted upon are discussed next. Some areas not yet assessed that might be considered in the future are discussed later.

Recent civilianization focus areas. Most of the recent civilianization activity has occurred in OAS or in areas that report directly to the commissioner. To date, the department has civilianized positions in four units that were once held by sworn personnel. These four units include:

- *Legal Affairs.* Legal Affairs liaisons with the Office of the Attorney General and the Office of the Chief State's Attorney and provides legal advice for the department that is concerned with: Claims filed against the department or department personnel;

⁹⁷ The 1,039 refers to those officers with a job code in CORE-CT of 32500.

Freedom of Information (FOI) requests for department public records other than for completed criminal investigation or traffic accident investigation reports; Collective bargaining issues; Service of civil process; Outside employment issues and other conflicts of interest; and Has oversight over the Firearms Review Board.⁹⁸

- *Special Licensing and Firearms Unit (OAS)*. The Special Licensing and Firearms Unit responsible to insure that all statutory and regulatory mandates are in compliance with regards to pistol permitting and revocation, all handgun sales, transfers and dealer firearm sales, licensing and regulation of private detective agencies, private detectives, security service companies, professional bondsmen, bail enforcement agents and the issuance of special police powers.
- *State Police Bureau of Identification (OAS)*. The State Police Bureau of Identification is responsible for the retention and dissemination of all criminal history records for the State of Connecticut and to process requests for background checks that are both “fingerprint supported” and “name and date of birth only.”;
- *Public Information Office (direct report to OFO)*: The Public Information Office has statewide responsibility to assist and support all state police troops and units by providing media support to all department functions.
- *Fingerprinting (OAS)*. The Fingerprinting Unit is responsible for processing, quality assurance, and retention of fingerprints provided by arrestees and job applicants across the state, as well as for arrestee fingerprints with the FBI.^{99,100}

Table XV-2. shows the number of sworn and civilian employees in each of the units that the department has civilianized as of January 1, 2013¹⁰¹, compared to the staffing one year prior. Legal Affairs and State Police Bureau of Identification (SPBI) have been completely civilianized over the last year, while the Public Information Office remains at the same staffing level as January 2012. The Special licensing and Firearms unit has experienced the most drastic change, decreasing by 7 sworn officers and 15 civilians in the past year.

⁹⁸ A&O Manual

⁹⁹ A&O manual 2.2.3c (3)(c)3.

¹⁰⁰ The Fingerprinting unit had a sworn officer who served as a manager to the unit but this position was civilianized in the fall of 2012. The unit has 11 civilians.

¹⁰¹ Data in core were available for January 1, 2013 and there could be some variation in the number of sworn and civilians currently in the unit.

Table XV-2. Sworn and Civilian Personnel in Areas that have been Civilianized				
Unit	Jan 1, 2012		Jan 1, 2013	
	Sworn	Civilian	Sworn	Civilian
Legal Affairs	2	3	-	7
Public Information Office	1	3	1	3
State Police Bureau of Identification**	-	-	-	5
Special Licensing and Firearms	13	42	8	18
Total	16	48	9	33
* Source: CORE-CT				
** No data in available core.				

Distinguishing which duties require sworn officers or not more difficult in some units than others when a unit involves a mix of functions some that require law enforcement authority and some that do not. Table XV-3. lists examples of job functions performed by sworn and civilian personnel in each of the units.

Table XV-3. Examples of sworn and civilian duties in areas that have been civilianized		
<i>Unit</i>	<i>Duties of Sworn Personnel</i>	<i>Duties of Civilian Personnel</i>
Legal Affairs	No sworn personnel	<ul style="list-style-type: none"> • Unable to determine
Public Information Office	<ul style="list-style-type: none"> • Facilitates media relations and officially releases information for the commissioner 	<ul style="list-style-type: none"> • Secretarial/clerical
State Police Bureau of Identification	No sworn personnel	<ul style="list-style-type: none"> • Sort mail • Sort and process III inquiries • Process NICS inquiry updates • Process incoming federal applicant cards • Operate front desk
Special Licensing and Firearms unit	<ul style="list-style-type: none"> • Determine an appellant's eligibility to possess firearms based on court orders • Assist state and local law enforcement agencies with necessary firearms compliance • Conduct Protocol training (if have POST certification) • Firearms vault oversight • Issue licenses and conduct inspections of bail enforcement agencies, professional bondsmen, and private investigators 	<ul style="list-style-type: none"> • Process pistol permit applications/renewals for the state • Issue licenses and conduct inspections of bail enforcement agencies, professional (background check component) • Issue authorization numbers for sale and transfer of handguns and most long guns in the state.

Special Licensing and Firearms Unit. The Special Licensing and Firearms unit is an example of a unit that requires at least some sworn officers. Duties of sworn officers include serving arrest warrants, managing the state's firearms vault, and conducting various criminal investigations involving licensing statutes and firearms sales and possession. The officers in this unit also deal with paperwork and other investigative duties that do not take them into the field every day.

The department completed its recent review of positions in the unit, which resulted in some officers placed back on patrol duties and civilians hired for those positions. There are still a number of sworn personnel in the unit that the Division believes is adequate to fulfill the law enforcement roles and responsibilities.

State Police Bureau of Identification. Other units, such as the State Police Bureau of Identification, do not need a law enforcement officer for any phase of its operations. Specifically, SPBI is responsible for the retention and dissemination of criminal history records for the state. Additionally, the unit processes all requests for background checks in the state. It has been determined that the responsibilities of the unit can be completed with an all-civilian staff. Other than a temporary light duty officer, there are no sworn personnel currently assigned to the unit.

Potential areas for civilianization. Throughout the course of this study several additional units were mentioned by the committee and at the public hearing as areas that could be considered for civilianization. The units located in OAS and the Division of Scientific Services identified as possible areas for civilianization were:

- *Computer Crimes (Division of Scientific Services):* Detectives and officers in this section carryout criminal investigations involving an assortment of crimes committed utilizing a “computer”, in its various forms, to facilitate criminal activity.¹⁰²;
- *Fire and Explosive Investigation (OAS):* The unit conducts cause and origin of fires and arson investigations; circus, carnival ride and amusement park inspections; hazardous materials and explosives licensing and investigations; licensing and permits of fireworks and special effects displays; and training in all of these areas.¹⁰³;
- *Polygraph (OAS):* This unit conducts polygraph examinations for criminal investigations and pre-employment examinations for police agencies; and
- *Sex Offender Registry (OAS):* The unit establishes registration procedures, and registers all sexual offenders that require registration and maintains the registrations as prescribed by law. Also, the unit makes notifications to appropriate agencies.¹⁰⁴

These units were chosen because they were units outside of the patrol function that had sworn personnel and had been topics of discussion with regards to civilianization. Table XV-4. shows the number of sworn and civilian personnel in each of the above units as of January 1, 2013.

¹⁰² A&O Manual 2.2.4d(1)(b)

¹⁰³ A&O Manual 2.2.3c (3)(b).

¹⁰⁴ A&O Manual 19.3.27c

Table XV-4. Sworn and civilian personnel in potential areas for civilianization		
Unit	2013	
	Sworn	Civilian
Computer Crimes	11	3**
Fire and Explosive Investigation	14	1
Sex Offender Registry	6*	3
Polygraph	4	-
Total	31	18
* As of 1/27/13, there were 3 sworn officers in the unit and 1 civilian has been added. ** 6 additional civilians were hired in early 2012 and have been transitioning into forensics positions once held by sworn officers Source: CORE-CT		

Based on interviews with each of these units, there are components of the positions that could be completed by non-sworn personnel; however, given the responsibilities of the units, a majority of the duties in these units require the expertise and law enforcement capabilities of a sworn officer. Examples include serving arrest warrants, conducting criminal investigations, or conducting raids. Table XV-5 lists a few examples of the responsibilities of sworn and civilian personnel in the units.

Table XV-5. Examples of sworn and civilian duties in potential areas for civilianization		
<i>Unit</i>	<i>Duties of Sworn Personnel</i>	<i>Duties of Civilian Personnel</i>
Computer Crimes	<ul style="list-style-type: none"> • Conduct investigations referred from NICMIC, local police departments, other CSP units/functions • Scene processing: serving search warrants, collection of evidence, processing of evidence and field examination • Field assists for other agencies • Investigative assists with other agencies • Cooperative investigations with Federal agencies 	No civilian personnel
Fire and Explosive Investigation	<ul style="list-style-type: none"> • Assist local fire marshals, police and state police troops with the investigation of fires and explosions • Investigate all serious injury or fatal carnival ride accident investigations • Inspect circus tents and the setup inspections of all carnival and fixed amusement rides in the state 	<ul style="list-style-type: none"> • Clerical assistant completing reports and filing.
Fingerprinting	No sworn personnel	<ul style="list-style-type: none"> • Identifying persons through fingerprint identification • Process state checks of criminal, and applicant fingerprints through AFIS • Process federal checks of criminal, and applicant fingerprints through AFIS • Check quality of fingerprints • Filing and pulling fingerprints using the SID Numeric System
Sex Offender Registry	<ul style="list-style-type: none"> • Complete investigative reports and arrest warrants • Register sex offenders • Complete photo updates for offenders • Enter, modify and cancel File19 entries in COLLECT • Probate name changes • Inmate release/intakes • DNA collection 	<ul style="list-style-type: none"> • Monitor daily correspondence • Address changes • Daily mailing of address verification letters • Run a monthly list, pull and prepare files for Registry Term Completes. • Notify superintendent of schools of address changes and new registration to jurisdiction
Polygraph	<ul style="list-style-type: none"> • Conduct polygraph examinations for CT Trooper Trainee and local/Municipal police agencies for pre-employment selection process • Conduct polygraph examinations for CSP and local/municipal criminal investigations 	No civilian personnel

Similar to the units that were already civilianized by the department, the number of sworn officers within these units is not large. It is important to realize that civilianization can assist in reassigning a number of sworn officers to other functions including patrol but other initiatives may be needed in order to achieve the overall goal of more officers available for patrol.

Cost-savings from civilianization. Measuring any cost-savings from civilianization efforts would involve a number of determinations:

- Was the position formerly by a sworn officer refilled or not?
- If the position was refilled, should just salary be compared between the sworn officer and the civilian, or should other costs be factored in (training, including certification requirements, and benefit costs)
- Lower overtime costs

Other states. Committee staff contacted state police in the computer crimes and polygraph units in the following states: Vermont, Maryland, Massachusetts, Maine, and New Hampshire, to determine whether sworn, civilian or some combination of both was staffing the units. Table XV-6 shows which states had sworn or civilians in the computer crimes unit.

Table XV-6. Other States with Sworn and Civilian personnel in Computer Crimes			
<i>Unit</i>	<i>Sworn Only</i>	<i>Civilian Only</i>	<i>Combination</i>
Vermont			X*
Maryland			X**
Note*: Vermont authorized 1 civilian examiner			
Note**: Maryland has 1 civilian forensic examiner			

As the table depicts, only two states responded to staff correspondence. Specifically, both the Vermont and Maryland Computer Crimes units were staffed with a combination of sworn personnel, which carry out the primary functions of each unit, and civilian personnel. Vermont however; only recently authorized one position for a civilian examiner and Maryland indicated it also had one civilian forensic examiner. Both states, like Connecticut, indicated the roles that sworn personnel have in the unit are multi-faceted and require law enforcement authority, but there was a need and benefit to civilian staff.

Table XV-7 shows the states that had sworn and civilian personnel in the polygraph unit.

Table XV-7. Other States with Sworn and Civilian personnel in Polygraph Units			
<i>Unit</i>	<i>Sworn Only</i>	<i>Civilian Only</i>	<i>Combination</i>
Connecticut	X	N/A	N/A
Maryland	X		
Massachusetts	X		
New Hampshire	X		
New York	X		
Rhode Island	X		
Vermont	X		
Source: Interviews with Connecticut State Police and Vermont State Police Polygraph Units			

Only Vermont responded to committee staff's calls to discuss the polygraph unit. The unit has no civilian employees and similar to Connecticut, the unit performs both criminal and pre-employment polygraph exams. The Vermont unit expressed that it did not think criminal polygraph exams should be completed by civilians. However, the unit described that there are instances when the demand for polygraphs is more than the unit can handle and some VT state agencies will hire out with a private vendor to conduct the pre-employment exams. Both Connecticut and Vermont expressed that there are aspects of the polygraph examiner position, such as providing testimony and investigative knowledge, that a civilian would not be capable of performing sufficiently without proper law enforcement training.

While committee staff only heard from one state regarding polygraph function, the following surrounding states to Connecticut have polygraph units that function with only sworn personnel: New Hampshire, Massachusetts, Rhode Island, Vermont and New York State Police.

Future civilianization efforts. The state police are in the process of shifting sworn personnel from positions that could be filled with civilians back to the patrol function. It is important to understand that the priority to civilianize positions within several units does not mean these units will be completely depleted of sworn officers. Rather, the actual numbers of positions that require sworn personnel should be evaluated and reduced if determined some roles may be completed by civilians.

Conclusions

The state police have set goals for both the civilianization and consolidation of the dispatch efforts, which are incorporated in the department's multiyear plan. However, as the department continues to evaluate where civilianization of positions should occur, it may benefit from a more in-depth analysis and formal plan to execute such future plans of civilianization.

Specifically, the state police could expand on its most recent staffing analysis, which describes each unit and staffing levels as of October 2012, to include position levels over time for both sworn and civilian staff. This expanded analysis could include the Human Resources department, to distinguish job descriptions between the duties of sworn and non-sworn personnel in units under future review for civilianization.

Additionally, committee staff's description of the CSP civilianization effort does not reflect a cost-benefit analysis of hiring more civilian personnel to fill these roles or the need to hire additional civilians to assist with the increasing responsibilities that several of these units face. Reports on the topic, discuss that the shift from sworn to civilian personnel is done as a means of cost savings.¹⁰⁵ This cost savings has been described in the form of lower pay, reduced training requirements, and smaller overhead requirements. These are areas where as the division pursues its civilianization goals in this area, should be considered and addressed.

¹⁰⁵ Office of Community Oriented Policing, (2011). *The Impact of the Economic Downturn on American Police Agencies*, U.S. Department of Justice, pg. 22.

Given that civilianization is a priority of the division, while at the same time a contentious topic for some, committee staff believes the department should continue to analyze all areas of its operations and move forward with its efforts to civilianize accordingly. Working with unit supervisors and managers to discern what job roles should be civilianized could assist in planning for civilianizing other units in the future.

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Summary of Model Standards

Five public safety related factors, and one trooper safety related factor were examined for their potential use as standards in determining CSP staffing levels:

1. Response time;
2. Solvability (clearance rates);
3. Safety/crime statistics;
4. Safety/accidents/highway fatalities statistics;
5. Citizen satisfaction with service; and
6. Trooper injuries.

In considering each factor, its relationship with CSP staffing levels was assessed. Table XVI-1 summarizes the detailed analyses contained in the various chapters of this report. Of the six factors examined, one—response time—was negatively correlated with staffing level. As the staffing levels declined, response times tended to increase.

Crime statistics also were unrelated to staffing levels; however, crime clearance rates for Crime Index (the most serious) offenses increased. One interpretation is the longer time is caused by more sophisticated, time-consuming investigative techniques, rather than due to a shortage of officers.

Highway safety statistics, such as fatal accidents and accidents with injuries, were determined unrelated to staffing levels. There was a decreasing trend in the number of DWI arrests, similar to changes in CSP staffing level decreases, perhaps due to fewer CSP available to apprehend intoxicated drivers.

Citizen satisfaction with services provided by CSP was unrelated to staffing levels as assessed by numbers of complaints and commendations.

Lastly, trooper injuries, such as department accidents, assaults on officers, and incidences of workers' compensation were unrelated to staffing decreases. The most recent data examined as part of this analysis, however, showed increases in assaults and workers' compensation cases that warrant future monitoring for sustained increases. There are also calls requiring two officers that are being handled solo, which could put officers unnecessarily at risk.

Table XVI-1. Summary of Findings on Public and Trooper Safety Related Factors		
Potential Factor	Related (R) /Unrelated(U) to staffing level changes?	Conclusion
Response time	R: Median response time increased, from 9 minutes to 10 minutes <i>BUT: Standard used by CSP in 1997 of at least 50% of calls responded to within 15 minutes continued to be met</i>	As staffing levels decrease, response times tend to increase CSP could develop a more stringent response time standard for more serious calls for service such as domestic violence
Crime statistics	R: The Group B crime DUI increased as overall staffing levels decreased, but the pattern was not consistent across Troop staffing level changes U: Crime Index and other Group A crimes	Crime statistics were unrelated to staffing levels in FY 09 to FY 12 This finding is similar to the national trend
Crime clearance rate	R: The time needed to clear Crime Index offenses increased at the same time staffing levels decreased U: Crime clearance rates remained unchanged, despites decreases in staffing levels	Another interpretation of the longer time to solve crimes is the result of more sophisticated investigative techniques requiring more time
Highway safety statistics	R: The decreasing trend in the number of DWIs is similar to the trend in the number of sworn personnel, perhaps due to fewer CSP available to apprehend intoxicated drivers U: As staffing levels declined, there was not a corresponding increase in traffic accidents, including fatal accidents U: Did not appear to be relationship between issuance of tickets and accidents with injuries	Highway safety statistics such as number of fatal accidents, and accidents with injuries were unrelated to staffing level decreases
Citizen satisfaction	U: # of citizen complaints or commendations was unrelated to staffing levels	Citizen satisfaction, expressed as either a complaint or compliment, was unrelated to staffing level changes
Trooper Injuries	U: # of department accidents U: # of assaults on officers U: # of workers' comp cases	<ul style="list-style-type: none"> • The most recent officer assault and workers' compensation information showed increases, warranting future monitoring for sustained increases • Regardless of staffing level, officers were responding solo to domestic violence and other calls requiring two officers

In addition to the response time factor, there were six additional factors related to staffing levels.

Provision of required functions. There are 15 units or task forces in statute that are specifically required to be administered by CSP. Unlike the Troops, there are no equivalent minimum staffing levels for sworn personnel in these units and task forces. Any of the mandated responsibilities considered relevant today, need to have minimum staffing level guidelines established or, if no longer necessary, be eliminated from statute.

Fulfillment of contractual obligations. CSP has contracted with municipalities to provide resident state troopers. These towns are relying on CSP to deliver this service under two-year contracts, which are often renewed. Having a sufficient number of staff to honor these contractual commitments is a factor in determining the total number of sworn officers needed by CSP.

Number of patrol staff. Patrol staff are the backbone of CSP and these positions need to be staffed in order to be able to patrol neighborhoods and highways, and respond to 9-1-1 calls for assistance. Application of the shift relief factor method takes into consideration the time patrol troopers are unavailable to perform their jobs, such as vacation and sick time. By applying the shift relief factor, there is a greater likelihood that an adequate number of troopers will be available for the 230 patrols used by CSP.

Patrol staff supervision. There needs to be an adequate number of supervisors to oversee the patrol troopers. Referred to as span of control, CSP has identified the optimum span of control as 6-8 troopers for every sergeant to supervise. Adequate numbers of sergeants to provide this supervision are another factor in assuring oversight of the troopers patrolling the neighborhoods and highways of Connecticut.

Two-officer minimum. The CSP Administration and Operations Manual specifies, under certain conditions, that two officers are required to respond to certain kinds of calls, including those related to domestic violence. Lack of adherence to this requirement could jeopardize officer safety and increase the risk of injury. A pattern of continual lack of attending to such calls for assistance with one other officer may be a sign of understaffing or, for example, the need for different dispersal of sworn personnel across the Troops.

Amount of Regular Duty overtime. One sign that there are not enough sworn personnel may be a sustained increase in use of regular duty overtime. This may cause health or safety issues for personnel and added expense for CSP. At a certain threshold, overtime—at time and a half pay—becomes more expensive than hiring additional staff.

Table XVI-2 summarizes the proposed CSP staffing level standards developed by PRI staff. An example of applying the CSP staffing level standards for FY 12 is shown in Table XVI-3.

Table XVI-2. Summary of Proposed Connecticut State Police Staffing Level Standards		
Standard Area	Standard	CSP Further Development of Standard
<i>Response time</i>	1. Officers respond to 9-1-1 calls within 15 minutes at least 50% of the time	CSP needs to establish response time standards for the most serious calls for service, as well as all other service calls.
<i>Provision of required functions</i>	2. Functions explicitly stated in statute are provided by CSP	CSP needs to establish minimum staffing levels for these functions—Unlike the Troops, which have minimum staffing levels to cover patrols, there are no such equivalent minimum staffing levels for these units; an alternative is elimination of the function or unit.
<i>Fulfillment of contractual obligations</i>	3. CSP fully meets contractual obligations to towns to provide resident state troopers	CSP is contractually-obligated to provide resident troopers to towns, which it has fulfilled. Continued analysis of the impact such contractual obligations have on Trooper staffing levels is necessary, given resident troopers account for approximately 20 percent of all patrol troopers.
<i>Number of Patrol Staff</i>	4. There is an adequate number of troopers to staff the 230 patrols, taking into consideration the shift relief factor	
<i>Patrol Staff Supervision</i>	5. Patrol and resident state trooper supervision is sufficient based on a 1:8 span of control	
<i>Two-Officer Minimum</i>	6. The two-officer minimum requirement for domestic violence, fatal accidents and untimely death/homicide calls for service are being met [at least 90% of the time]	With less than half of domestic violence calls responded to by sworn personnel assigned to Headquarters having two officers, CSP needs to develop a policy regarding who is available to respond to domestic violence calls.
<i>Amount of Regular Duty Overtime</i>	7. The use of regular duty overtime has not shown a sustained increase [three years in a row]	CSP needs to weigh sustained increases in overtime hours against the costs of hiring additional staff.

Table XVI-3. Application of Standards Based on FY 12 Data Compared with Actual Staffing

Standard	Stand ard Met?	Explanation of Standard Application	# CSP Sworn Personnel Needed	Actual # of CSP Sworn Personnel
Officers respond to 9-1-1 calls within 15 minutes at least 50% of the time	√	Standard was met		
CSP fully meets contractual obligations to towns to provide resident state troopers	√	Municipalities contracted with CSP for 110 resident state troopers	110	110
There is an adequate number of troopers to staff the 230 patrols taking into consideration the shift relief factor	√	Applying the SRF of 1.95 to 230.57 patrol shifts=449.6	450	448
Patrol and resident state trooper supervision is sufficient based on a 1:8 span of control	√	Applying the 1:8 span of control	71	78
Take into consideration 2.3 per 100 patrol troopers on light duty		Apply 2.3 per 100 to 449.6 needed patrol troopers	10	10
Take into consideration 5.6 per 100 patrol troopers on leave		Apply 5.6 per 100 to 449.6 needed patrol troopers	25	25
Take into consideration 4.6 per 100 sergeants on leave/light duty		Apply 4.6 per 100 to 71 needed sergeants	3	4
1 Master Sergeant per Troop			11	11
Subtotal			680	686
Functions explicitly stated in statute are provided	√	At least 15 units/task forces explicit in statute	?	122
Functions provided at Commissioner's discretion per C.G.S. Sec. 29-7		e.g. Emergency Svcs Unit, Major Crimes, etc.	228	228
Sworn Management (5%)			45	46
TOTALS			953 + functions explicitly stated in statute	1,082
The two-officer minimum requirement for domestic violence, fatal accidents and untimely death/homicide calls for service are being met [at least 90% of the time]	?	Add patrols selectively or reallocate existing patrols?		
The use of regular duty overtime has not shown a sustained increase [three years in a row]	√	Has not shown a sustained increase over the past three fiscal years		

APPENDICES

Appendix A. Specialized Units in the Office of Field Operations (OFO)

Bureau of Criminal Investigation (BCI)

Statewide Narcotics Task Force (SNTF). The Statewide Narcotics Task Force was created by legislation in 1977¹⁰⁶ to replace the state's system of regional narcotic squads and eliminated the State Narcotics Enforcement Coordinating Committee which supervised and controlled the operations of the regional squads.

As the largest unit within BCI, SNTF is responsible for the effective cooperative enforcement of laws concerning the manufacture, distribution, sale and possession of narcotics and controlled substances. Personnel of the task force primarily operate out of the five offices located throughout the state. The unit can conduct investigations of crimes which are not related to narcotics but finds that drugs are the nexus for other crimes and therefore, many of the cases in other areas of the bureau can be linked with the SNTF. Additionally, the task force can request and receive assistance from federal, state, or local agencies in the performance of its duties; as well as enter into mutual assistance with other states as it pertains to narcotics law enforcement matters.¹⁰⁷

This unit is comprised of a Captain, 2 Lieutenants, 8 sergeants and 12 detectives and over 20 local officers who are overseen by a Policy Board. The unit also has a civilian clerical support staff including one trainer. The task force receives funding from a variety of federal sources.

Statewide Organized Crime Investigative Task Force (SOCITF). SOCITF was established by statute in 1973 (Sec. 29-4) and serves as the oldest specialized unit within the Bureau. The purpose of this task force is to improve investigation and general law enforcement in Connecticut and is specifically tasked with conducting investigations on, but not limited to, organized crime, human trafficking, illegal gambling and prostitution, political corruption, and other organizations involved in similar activities. Additionally, in recent years the unit has assumed the lead role of human trafficking activities in the state.

Currently the unit operates with one shared Lieutenant, one shared sergeant and three detectives; there are no local officers assigned to the unit at this time. The unit receives funds from the department to cover specific costs such as case preparation and the technical costs associated with wiretaps. There is no specific funding for overtime in this unit.

Statewide Urban Violence Cooperative Crime Control Task Force (SUVCCCTF).¹⁰⁸ The Statewide Cooperative Crime Control Task Force was formed in 1993 in response to serious gang problems in many urban areas of the state. The task force conducts and coordinates investigations in connection with crimes of violence and other criminal activity deemed beyond

¹⁰⁶ PA 77-487

¹⁰⁷ C.G.S Sec 29-176 -77

¹⁰⁸ In 2006, PA 7-148 changed the name of SCCCTF to the State Urban Violence and Cooperative Crime Control Task Force.

the ability of local authorities to contain.¹⁰⁹ Additionally, the unit investigates violent gang activity in the state's urban areas, which could include motorcycle gangs, and gangs of an anti-religious and/or race nature. The intent of the unit is to establish strong investigative cases that will lead to maximum prosecution and subsequent sentencing. The task force has addressed quality of life issues and engaged in street crime suppression activities primarily in the city of New Haven.

Unit operations are primarily in the greater Bridgeport area, and the unit is staffed with one shared CSP Sergeant, one CSP Detective, one Bridgeport Sergeant and detective, and three Department of Correction Officers.

Statewide Firearms Trafficking Task Force (SFTTF). Established in statute in 2000,¹¹⁰ the Statewide Firearms Trafficking Task Force is one of the newest units to the bureau. The task force was created after an increase in gun trafficking and gun related shootings associated with street gang activity.¹¹¹ In addition to the abilities described above the task force has the responsibility to (1) review the problem of illegal trafficking in firearms and its effects, including its effects on the public, and implement solution to address the problem; (2) identify persons illegally trafficking in firearms and focus resources to prosecute such persons;(3) track firearms which were sold or distributed illegally and implement solutions to remove such firearms from persons illegally in possession of them; (4) coordinate its activities with other law enforcement agencies within and without the state.¹¹²

The task force is comprised of state law enforcement officers and has the ability to request the cooperation and help from other agencies at the federal, state, or local level. The unit is staffed with one shared CSP Lieutenant, one shared CSP sergeant, and one CSP detective and is overseen by a policy board. Currently the policy board is looking to turn oversight of the unit over to CSP.

Connecticut Regional Auto Theft Task Force (CRATIF). Established in 1994, this task force conducts criminal investigations related to automobile theft, auto theft rings, and "chop shops," as well as providing expertise in the identification of stolen motor vehicles and parts within the states boundaries. The task force also collaborates with other local, state, and federal agencies and various insurance investigators on complex investigations. The task force is currently comprised of one shared CSP Lieutenant as the commanding officer, one shared CSP Sergeant, two CSP Detectives, One Shelton Police Detective, and an agent from the National Insurance Crime Bureau.

Central Criminal Intelligence Unit (CCIU). Formed in 1967 and reorganized by statute in 1973,¹¹³ the CCIU provides background support to complex investigations through numerous electronic checks. Specifically, the Electronic Surveillance Lab, a sub unit of CCIU,

¹⁰⁹ C.G.S. Sec. 29-179f

¹¹⁰ C.G.S. Sec. 29-38e.

¹¹¹ BCI Staffing Analysis

¹¹² C.G.S. Sec. 29-38e.

¹¹³ PA 73-592

conducts the wiretap plant and its supporting technology and equipment. This unit is staffed with any one shared CSP Lieutenant, one shared CSP sergeant, 2 CSP detectives and one civilian analyst.

Statewide Fugitive Unit: In 2011, the sworn officers in this unit were redeployed to other areas of the agency in order to meet minimum manpower requirements. Since then, the unit has not been staffed.

Extradition Unit. Formerly part of the Central District Major Crime Squad, the Extradition Unit facilitates the coordination of documents between the judicial system, the governor's office and the secretary of state's office for extraditions and renditions of prisoners for both state and local police agencies. The unit is also responsible for the transfer of prisoners to out of state law enforcement entities and is tasked with making in-custody arrests at courts throughout the state. This unit is currently staffed with one CSP detective.

In addition to the units and task forces mentioned above, staff can be assigned to a number of special assignments or operations associated with federal task force operations to assist other state and federal agencies with long-term investigations. BCI personnel are currently assigned to the following task forces; Hartford Gun Task Force, New Haven Gun Task Force, New Haven F.B.I. Organized Crime Task Force, Hartford F.B.I Safe Streets Initiative U.S. Secret Service Financial Crimes Task Force, and DEA Bridgeport.

Emergency Services Unit

Aviation Unit. The aviation unit responds to calls for service that require surveillance, traffic enforcement, search and rescue, marijuana field location and eradication, photo missions, tactical operations medical transport and forest fire suppression. This unit is also available for situations needing emergency medical support including tactical situations, weapons of mass destruction incidents, mass casualty incidents, and search and rescue. This unit recently applied for and received \$300,000 in grant monies under the 2012 Port Security Grant in order to fund the repairs needed for one of the agencies helicopters. The unit currently has two full time pilots and the unit is in the process of hiring additional personnel.

Bomb Squad. The bomb squad responds to and investigates incidents involving explosives. Specifically, the unit searches for explosives with trained canines, conducts firework seizures, stores evidence (not including IED's), provides technical assistance for post blast investigations, and destroys old ammunition, flares and chemical munitions. State Police Bomb technicians along with their K9 partners provide security at large events via Explosive Ordinance Detection security sweeps at a variety of venues including high school graduations to college football games.

The bomb technicians also aid the Federal Bureau of Investigation as member of the Weapons of Mass Destruction –Joint Terrorism Task Force. Squad members are also trained as Hazardous Materials Technicians who are available for assistance at incidents involving chemical, biological, radiological, nuclear and high yield explosive incidents. The FBI provides

assistance, oversight, and training to bomb squads nationally as well the CSP bomb squad. The unit is authorized thirteen bomb technicians per the FBI however, is only staffed with nine officers.

Canine Unit. The Canine unit is available to assist with a variety of situations including; tracking, building search, criminal apprehension, search and rescue, body recovery, searches for explosives, narcotics, and evidence of accelerants in suspected arson cases. The State Police K9 unit is also responsible for training and certifying canines from various local, state and federal agencies. This unit has full time sworn personnel at the Meriden complex and additional handlers across division units including Fire and Explosive Investigative Unit, each of the Troops, ESU, and BCI units. Several of the full-time sworn personnel are cross-trained for other ESU units and are sometimes required to report to calls outside of the canine function.

Dive Team/Marine Unit. The Dive and Marine units respond to any emergency in a marine environment including; lost boaters, search and rescue, underwater evidence recovery, hull and pier sweeps. Both units assist the US Coast Guard in providing side scan sonar searches to ensure that water ways are clear from hazards for safe commercial and recreational boating. The frequency of calls that this unit responds to varies by the time of year however, the unit sees an increase in calls during the summer months The ESU Dive Team /Marine Unit is staffed with four (4) full time divers, of which, two (2) share responsibilities in other areas (Master Sergeant and 1 Tactical Team Leader). Additionally there are 11 part time Divers spread across the state in various units/Troops.

Mass Transit Security Team. This unit is grant funded and was fielded in the spring of 2011. This unit provides radiological detection capabilities and explosive detection K9s at mass transit venues throughout the state. The unit plays a role in with the Transportation Security Administration's Visible Intermodal Prevention and Response (VIPR) missions and work closely with other local, state and federal partners along the state's rail line and ferry terminals. The unit is currently staffed with 6 full time sworn officers including one sergeant and six Troopers. The unit is fully funded other than the Sergeant supervisor and no additional officers have been authorized at this time.

Tactical Team (SWAT). The Tactical Team is involved in any high risk incident which could include but is not limited to; barricaded subjects, hostage situations, searches for armed and dangerous subjects, high risk warrant service, special transportation protection, dignitary protection, hostage negotiators, etc. This Unit consists of 1 commander, 2 deputy commanders, 15 operators (West), and 15 operators (East). As of July 2012, 11 members have been assigned to ESU in a full time capacity with the remaining 24 operators acting in a part-time capacity

Traffic Services Unit

Commercial Vehicle Enforcement (CVE) Teams. The CVE teams work in conjunction with the Department of Motor Vehicles and are responsible for enforcing the state's size and weight laws and operating the state's six fixed weigh stations/ inspection facilities.

Additionally, the CVE personnel are responsible for the portable scale operations across the state.

Aggressive Driving Teams. The Aggressive driving teams are responsible for selectively enforcing the state's traffic laws, with emphasis on hazardous moving violations and other aggressive driving behaviors.

Collision Analysis and Reconstruction Squad (C.A.R.S.). The primary function of the unit is to assist Troop commands with collision investigations, reconstructions and diagramming of accident scenes. This function of CSP is highly trained in accident reconstruction and utilizes special equipment and techniques in order to document collision scenes, analyze data and employ scientific methods to determine the cause and contributing factors of collisions. The teams provide investigative assistance to state and local law enforcement agencies for collision and criminal cases.

Direct Reports to OFO

Department of Developmental Services Liaison. One state police officer is assigned full-time as the Director of Investigations at DDS. The officer is responsible for overseeing civilian investigators, who conduct investigate allegations of physical, verbal, psychological, financial, and sexual abuse and all forms of neglect perpetrated against the intellectually disabled in the state. This officer is provided at the expense of the agency.

Governor's security. Officers assigned to this function provide protection services to the Governor and Lieutenant Governor.

Missing Persons Team. Officers in an adjunct capacity, work on complex and cold missing persons investigations.

Stadium Operations/ Rentschler Field. Officers report to this unit on an ad hoc basis and oversee state police operations at sporting and other events held at the facility.

Appendix B. Specialized Units in the Office of Administrative Services

Bureau of Training and Support Services

Polygraph unit. The Polygraph Unit conducts polygraph examinations as part of the law enforcement employment selection process for the State Police but also for local and municipal police agencies. In addition to pre-employment exams the unit officers also conduct polygraph examinations in support of criminal investigations being conducted by state police or local police agencies. The unit is comprised of four sworn state police officers.

Fire and Explosion Investigation Unit. The FEIU is the only investigative specialized unit under OAS and has several duties that it performs across the state, including:

- assist local fire marshals, local police, and state police troops with the investigation of fires and explosions.
- the investigation of all serious injury and/or fatal carnival ride accidents, the inspection of circus tents, and the set-up inspections of all carnival and fixed amusement rides in the state; and
- assist the Department of Construction Services with the inspection and investigation of commercial fireworks and explosives, assisting the state fire marshal, and State building inspector in conjunction with the Codes and Standards Committee with investigations of local fire marshals and building officials.

This, like other specialized units, requires additional training not received from the academy or field, in order to perform the duties of the unit. Specifically, the sworn personnel are required to maintain 90 hours of in-service training in a three-year period for the fire marshal certification. Other certifications and trainings are necessary to complete the amusement ride inspections. The unit is staffed with fourteen sworn officers and one civilian office assistant.

Appendix C. Sworn personnel in other areas of DESPP

Division of Emergency Services and Homeland Security (DEMHS)

Office of Counter Terrorism. The Office of Counter Terrorism (OCT) utilizes resources across the state to develop unified safety and security measures to deter, prevent, mitigate, and manage criminal and/or terrorist incidents threatening the quality of life of the citizens of Connecticut.¹¹⁴ The office includes sworn state police assigned to the Division of Emergency Management and Homeland Security (DEMHS). Sworn personnel serve many functions in the unit including: serving as liaisons, coordinating efforts and fostering partnerships with local, state, and federal agencies, and completing investigations and operations with a homeland security mission. The Office is comprised of three subunits:

1. *Critical Infrastructure Unit (CIU).* This unit assesses and protects Connecticut's public and private critical infrastructure assets and key resources. This includes both public and private entities (physical and cyber-based) which are essential to maintaining minimum operational capabilities of government. Officers assigned to the unit are responsible for overseeing all safety and security at Rentschler Field. Additionally, the unit is called upon by the U.S. Secret service to assist and provide intelligence officers for Dignitary Protection details.
2. *Members of the FVI Joint Terrorism Task Force (JTTF).* Investigators assigned to the unit work with local, state and federal investigators who are dedicated to combat terrorist activities. The officers in the unit are deputized US Marshals and derive their powers from the FBI, which allows them to investigate and enforce laws as they pertain to US Code.
3. *Connecticut Intelligence Center (CTIC).* CTIC collects, evaluates, analyzes and disseminates criminal and terrorism-related intelligence to all law enforcement agencies in Connecticut. The unit acts as the primary conduit of information sharing for the state, as well as nationally. This unit is comprised of partners at the local, state, and federal levels (e.g. Division of State Police, Department of Corrections, CT National Guard, and U.S. Coast Guard). Personnel from additional state agencies are available as subject matter experts and assist investigations on an as needed basis.

Division of Scientific Services

Computer Crimes. The Computer crimes unit is the lead agency in the state for Internet Crimes Against Children (ICAC). The unit receives federal funding through the Office of Juvenile Justice and Delinquency Prevention to sustain ICAC computer related investigations that involve the exploitation of persons under the age of 18. The unit works closely with several agencies (e.g. FBI's Cyber Crime unit, Immigration and Customs Enforcement, US Attorney's

¹¹⁴ State Police Staffing Analysis: Office of Counter Terrorism

Office) to ensure computer related investigations and offenders who utilize electronic devices as the instrument of a criminal act are appropriately prosecuted.¹¹⁵ There are 42 municipal law enforcement agencies operating in under and in conjunction with the CTICAC. The tips that generate criminal investigations typically involve court orders, search warrants and forensic or preview examinations on suspected evidence. The unit is also responsible for handling peer-to-peer cases or the exchange of child pornography and conducts online predator, white collar crime and complex fraud investigations.

Unlike other specialized units the computer crimes conducts its own investigations and examines its own physical evidence as well. Computer Crimes also works in a support capacity with other units in the state police, serving as subject matter experts and assisting with search warrants that require specific technical language. The unit is responsible for training, issuing equipment and working with affiliate agencies

The unit currently has 8 sworn detectives, a sergeant and two temporary light duty officers. The average caseload is between 6-10 for each investigator but does not fully reflect the workload as each case has its own intricacies and can take anywhere from 1-6 months to collect sufficient evidence.

¹¹⁵ State Police Staffing Analysis: Computer Crimes Unit

Appendix D. Police Service Type by Town and Number of Officers: FY 12

	Town	CSP District	Troop	Service Type and Number of Officers			
				Local PD	RST	Constables	CSP
1	Andover		K		1		
2	Ansonia		I	46			
3	Ashford		C				1
4	Avon		H	36			
5	Barkhamsted		B		1		
6	Beacon Falls		I		1	10	
7	Berlin		H	41			
8	Bethany		I		1	5	
9	Bethel		A	39			
10	Bethlehem		L		1	6	
11	Bloomfield		H	48			
12	Bolton		K		2		
13	Bozrah		K				1
14	Branford		F	59			
15	Bridgeport		G	442			
16	Bridgewater		A		1	3	
17	Bristol		L	110			
18	Brookfield		A	34			
19	Brooklyn		D		2		
20	Burlington		L		2	10	
21	Canaan		B				1
22	Canterbury		D				1
23	Canton		L	15			
24	Chaplin		D		1		

25	Cheshire		I	49			
26	Chester		F		1	3	
27	Clinton		F	27			
28	Colchester		K		1	11	
29	Colebrook		B				1
30	Columbia		K		1		
31	Cornwall		B				1
32	Coventry		C	14			
33	Cromwell		H	26			
34	Danbury		A	157			
35	Darien		G	55			
36	Deep River		F		1	3	
37	Derby		I	36			
38	Durham		F		1		
39	East Granby		H		2	4	
40	East Haddam		K		2	5	
41	East Hampton		K	16			
42	East Hartford		H	120			
43	East Haven		I	56			
44	East Lyme		E		1	21	
45	East Windsor		H	20			
46	Eastford		D				1
47	Easton		G	17			
48	Ellington		C		5	12	
49	Enfield		H	94			
50	Essex		F		2	3	
51	Fairfield		G	107			

52	Farmington		H	49			
53	Franklin		K				1
54	Glastonbury		H	56			
55	Goshen		B				1
56	Granby		H	15			
57	Greenwich		G	174			
58	Griswold*		E		2		
59	Groton (Town)		E	67			
60	Guilford		F	37			
61	Haddam		F		2		
62	Hamden		I	104			
63	Hampton		D				1
64	Hartford		H	481			
65	Hartland		B				1
66	Harwinton		L		2		
67	Hebron		K		2	5	
68	Kent		L				1
69	Killingly		D		4		
70	Killingworth		F		1		
71	Lebanon		K		1	3	
72	Ledyard		E		1	21	
73	Lisbon		E		1		
74	Litchfield		L		1.5	3	
75	Lyme		F				1
76	Madison		F	32			
77	Manchester		H	116			
78	Mansfield		C		9	3	

79	Marlborough		K		2	2	
80	Meriden		I	123			
81	Middlebury		A	15			
82	Middlefield		F		1	2	
83	Middletown		F	103			
84	Milford		I	112			
85	Monroe		G	44			
86	Montville		E		1	23	
87	Morris		L				1
88	Naugatuck		I	56			
89	New Britain		H	131			
90	New Canaan		G	43			
91	New Fairfield		A		7	6	
92	New Hartford		B		2	2	
93	New Haven		I	418			
94	New London		E	81			
95	New Milford		A	49			
96	Newington		H	51			
97	Newtown		A	46			
98	Norfolk		B		1		
99	North Branford		F	22			
100	North Canaan		B		1		
101	North Haven		I	49			
102	North Stonington		E		3		
103	Norwalk		G	173			
104	Norwich		E	83			
105	Old Lyme		F		1	9	

106	Old Saybrook		F	27			
107	Orange		I	43			
108	Oxford		A		5	8	
109	Plainfield		D	16			
110	Plainville		H	31			
111	Plymouth		L	27			
112	Pomfret		D				1
113	Portland		K	12			
114	Preston		E		2		
115	Prospect		I		1	16	
116	Putnam**		D				1
117	Redding		A	17			
118	Ridgefield		A	41			
119	Rocky Hill		H	34			
120	Roxbury		A		1	1	
121	Salam		K		2		
122	Salisbury		B		1	1	
123	Scotland		D				1
124	Seymour		I	42			
125	Sharon		B				1
126	Shelton		I	54			
127	Sherman		A		1		
128	Simsbury		H	35			
129	Somers		C		5	3	
130	South Windsor		H	40			
131	Southbury		A		1	20	
132	Southington		H	73			

133	Sprague		E		1		
134	Stafford		C		4	6	
135	Stamford		G	275			
136	Sterling		D				1
137	Stonington		E	38			
138	Stratford		G	115			
139	Suffield		H	22			
140	Thomaston		L	15			
141	Thompson		D				1
142	Tolland		C		5		
143	Torrington		B	87			
144	Trumbull		G	74			
145	Union		C				1
146	Vernon		C	45			
147	Voluntown		E				1
148	Wallingford		I	67			
149	Warren		L				1
150	Washington		L		1	3	
151	Waterbury		A	282			
152	Waterford		E	48			
153	Watertown		L	45			
154	West Hartford		H	126			
155	West Haven		I	119			
156	Westbrook		F		3	5	
157	Weston		G	15			
158	Westport		G	73			
159	Wethersfield		H	48			

160	Willington		C				1
161	Wilton		G	43			
162	Winchester		B	18			
163	Windham***		K				1
164	Windsor		H	49			
165	Windsor Locks		H	24			
166	Wolcott		A	25			
167	Woodbridge		I	26			
168	Woodbury		L		1	12	
169	Woodstock		D				1
169				6565	109.5	250	
	Willimantic	43					
	Putnam	15					
	Groton City	31					
	Groton Long Pt	10					
		99					

* Within Town of Griswold is the Borough of Jerwitt City, which has resident troopers
** Within the Town of Putnam is the Borough of Putnam with 15 officers (Putnam PD); rest of town served by CSP
*** Within the Town of Windham is the City of Willimantic with the Willimantic PD 43 sworn officers; Also within Windham is a small community known as Windham Heights has two troopers from normal patrol assignment is assigned.
Constables as of September 2012.
Source of data: POST

Appendix E. Recruitment, Selection, and Post Academy

P.A. 12-1 June Special Session requires the program review committee to examine trends in the staffing of State Police patrol positions, which this chapter provides. Prior to working for the State Police, however, there is a formal process used to recruit, hire, and train troopers. A description of that process is provided below, followed by the staffing analyses.

The only way for the State Police to increase the total number of sworn personnel in the division is by graduating a Trooper Trainee class from the State Police Academy (i.e., Academy). The Bureau of Training and Support Services within the Office of Administrative Services is responsible for the process to recruit and select new Trooper Trainees. There are three sections within the bureau which aid in the recruitment and selection process of Trooper Trainees:¹¹⁶ Background Investigative, Training Academy, and Polygraph. The Recruitment and Selection Unit, also within the bureau, is further dedicated to identifying, recruiting and selecting qualified candidates for appointment as State Police Trooper Trainees.

Recruitment Criteria

To apply to be a candidate for the position of Trooper Trainee, the applicants must fulfill a number of minimum qualifications, which include:¹¹⁷

- Be at least 21 years of age by end of application period
- Be a U.S. citizen by date of appointment
- Be in general good health and have sufficient strength, stamina and agility as required by the duties of the position
- Possess a high school diploma or GED by the completion of training
- Be free from felony and Class A and B misdemeanor convictions
- Have a good educational and/or work record and excellent moral character
- Have normal hearing, normal color vision, and depth perception
- Prior to Academy graduation, candidates must obtain or retain a current valid Connecticut Motor Vehicle Operator's License and establish Connecticut residency.

¹¹⁶ Completing Background Investigations and Polygraphs for the pre-employment selection process is not the only function of these units.

¹¹⁷ Connecticut State Police Recruitment brochure

Selection Process

The selection process to become a state trooper consists of the following testing phases: written exam; physical fitness; background check; psychological assessment; medical evaluation; and oral assessment.

By completing all of the phases in the selection process, an applicant is eligible for final appointment as Trooper Trainee. Once the final list of qualified candidates has been formed, the Selections Management Committee will select candidates starting from the individual with the highest overall score, and work down the list until all offers have been made, initially dependent on the authorized size of the class. If an offer is deferred or declined, the Committee will continue to work down the official list until each approved position has been filled. Once the Academy begins, if a Trooper Trainee is dismissed or withdraws then their position cannot be refilled.

Written exam. The exam, developed in collaboration with the CSP and the Department of Administrative Services (DAS) and administered by DAS, requires a minimum score of 65 to pass. Once a written exam is promulgated, candidates' results are valid for one year. However, DAS may extend the exam results for two additional years, not to exceed three years. Extending the exam results allows the unit to access a pool of candidates that can be used to fill multiple Trooper Trainee classes. For example, the last two written exams averaged 4,800 total applicants.

Those candidates who score between 100 and 88 on the written exam will be chosen to go onto the agility phase. Those from this first group who successfully complete the selection process will be the first Academy class from that particular exam. When constructing the next Trooper Trainee class, the unit will begin with those individuals who scored in a range determined by the unit beginning with a score of 87. For example, the Trooper Trainee class that began on June 1, 2012, is the second class from the 2009 exam.

Physical fitness. The physical fitness portion of the process consists of four exercises where each candidate must perform each exercise at the 40th percentile, based upon the gender and age criteria established by the Cooper Institute for Aerobic Research. In order to measure muscular endurance, flexibility, and aerobic fitness, each candidate must complete a certain number of push-ups (timed one minute) and sit-ups (timed one minute), a sit and reach test, and a 1.5 mile run under specified times.

Polygraph. The Recruitment and Selections unit works in conjunction with the Polygraph Unit to administer the pre-employment polygraph. The polygraph examination is administered by certified members of the polygraph unit.

Once complete, the commanding officer of the Selection Unit presents any potentially disqualifying information to the Selection Management Committee for its review. The committee is made up of approximately seven sworn individuals who may eliminate a candidate

from further consideration or permit him or her to continue in the process. According to the recruitment supervisor, 50 percent of the candidates who take the polygraph exam fail, not because they fail the actual polygraph test but because the content of their responses was concerning. Disqualifying information may include: criminal activity reported or unreported; drug use depending upon the type, frequency, and time of use; poor motor vehicle driving history; or questionable employment history.

Background investigation. In order to obtain an accurate assessment of a candidate's suitability for employment, a comprehensive pre-employment background check is completed by a sworn member of the Division of State Police. Once the background investigation is complete, the Selection Management Committee reviews and rates each applicant's file. Candidates are given a numeric score of 1=worst to 7=best, and are considered on, but not limited to, the following factors: employment history; motor vehicle history; criminal history; drug use; education; training; police/military service; and personal references. It is important to note that the background investigation is the most time-consuming aspect of the selection process. One background check takes a minimum of 40 hours to complete. It is possible that a background check could be pending until the first day of the Academy.

Psychological assessment. Candidates are given a series of written tests and a personal interview with a licensed clinical psychologist. Those deemed by the psychologist as being suitable for employment in law enforcement continue on to the next stage of the process.

Medical evaluation. Each candidate is given a comprehensive medical evaluation 30-45 days prior to the start of the Academy. The medical evaluation consists of a comprehensive physical examination and a drug screening. If a candidate has a medical or physical condition that bars the candidate from performing the essential functions of the position, the candidate will be eliminated from the process.

Oral interview. The final phase includes a structured interview with a panel of three State Police sworn personnel.

Timeframe. From the time the Department of Administrative Services administers the written exam it takes approximately a year to go through the entire recruitment, selection, and training process. Training at the Academy takes six months and upon graduation a new Trooper is required to complete 30-50 hours of field training with a Field Training Officer out of the trooper's assigned barracks.

Post-Academy Requirements

Once a Trooper graduates from the Academy, education and training do not cease.¹¹⁸ Each trooper is required to attend several mandatory in-service trainings. The trainings cover additional curricula recommended by the In-Service Training Committee. In-service training has

¹¹⁸Training is also provided by the Academy to dispatchers and communication personnel, troop clerks, data entry operators, receptionists and others who deal with the public on a regular basis.

both an on-line, web-based component, as well as a traditional classroom component that takes place at the Academy. The on-line component is accessed by sworn personnel at their respective troops/units with a testing module to ensure proficiency in the material presented.¹¹⁹ These trainings are administered throughout the year and serve as a way to refresh and introduce new fields as necessary.

As outlined in CALEA requirement 8.2.1, in-service training assists employees to perform their work by maintaining or acquiring skills. CALEA standard 33.1.2 1 lists the mandatory annual in-service training for all troopers which are completed primarily at the State Police Academy or CSP Pistol Range. These mandatory subjects include: annual firearms re-qualification and use of force training; medical response training (MRT); gang related violence (C.G.S. Sec. 7-294I); pursuit driving; rape crisis intervention (C.G.S. Sec. 7-294f); juvenile matters (C.G.S. Sec. 7-294h); bigotry and bias crimes (C.G.S. Sec.7-294n); and legal updates and other subjects which address greater efficiency in department operations and administration or which are mandated by law.

¹¹⁹ CSP Training Academy and Range Staffing Analysis

Appendix F. Division of State and Federal Grants

Department of Emergency Services and Public Protection

Division of State Police

Grant Summary

<i>Bureau / Unit</i>	<i>FY</i>	<i>Grant Title</i>	<i>Period of Award</i>	<i>Award Amount</i>	<i>Description</i>	<i>Budget</i>
Field Technology Unit	2011	E-Citation Grant Pilot Program	02/08/11 - 09/30/11	\$ 50,000.00	To purchase in car printers to process electronic tickets	Equipment & Supplies
	2008	E-Citation Grant Pilot Program - D.O.T.	01/22/09 - 09/07/09	\$ 31,250.00		
Bureau of Criminal Investigations	2007	COPS Methamphetamine Initiative	09/01/07 - 02/28/13	\$ 450,000.00	To fund a three step approach to the increase in clandestine meth labs in the State of CT	Equipment & Supplies, Training & Overtime
	2005	Human Trafficking Task Force initiative	04/01/05 - 03/31/11	\$ 448,983.00	To ensure that trafficking operations and victims are identified in CT and through cooperative efforts victims are rescued, served while offenders are apprehended and prosecuted.	Equipment & Supplies, Training & Overtime
		ARRA Statewide and Regional Drug Task Force	09/01/09 - 06/30/11	\$ 900,000.00	To provide monthly stipends to local police departments their participation in the Statewide Narcotic Task Force (SNTF) or the Statewide Urban Violence Cooperative Crime Control Task Force (SUVCCCTF)	Monthly Stipends to Local Police Departments
	2011	Stipend for Local Violent Crime Reduction Initiative	10/15/11 - 12/31/11	\$ 100,000.00		
	2012	Stipend for Local Violent Crime Reduction Initiative	1/1/12 - 06/30/12	\$ 350,000.00		
	2012	Stipend for Local Violent Crime Reduction Initiative	10/01/12 - 3/31/13	\$ 87,000.00		

	2007	Targeting Violent Crime Initiative	10/01/07 - 11/30/11	\$ 1,100,000.00	To enhance CSP's ability to combat violent crime within the State of CT	Equipment & Supplies, Training & Overtime
Criminal Justice Information Systems	2008	Fingerprint Backlog Criminal History Records Upgrade	03/02/09 - 09/30/10	\$ 100,000.00	To reduce the backlog of fingerprint cards of offenders not included in the criminal history repository.	Contractual services
	2011	NCHIP - Disposition Backlog: Criminal History Records Update	10/01/10 - 09/30/12	\$ 164,917.00	to work solely on the backlog of the 500,000 court disposition abstracts by updating the records in the CCH.	Personnel costs, contracting costs
	2012	NCHIP - Disposition Backlog: Criminal History Records PT 3	10/1/2011 - 9/30/13	\$ 176,305.00		
	2008	NCHIP COLLECT Replacement Subject Matter Expert	03/02/09 - 09/30/10	\$ 97,500.00		
	2010	ARRA Automated Fingerprint Technology Grant Program	4/15/10 - 12/31/12	\$ 1,000,000.00	To provide CT law enforcement agencies the ability to electronically transit fingerprints to SPBI and FBI	Equipment, supplies
Emergency Services Unit	2007	Bomb Squad Set-Aside	This funding is awarded to the CSP Bomb Squad but administered by DEHMS.	\$ 44,000.00	Funding from the Homeland Security Grant specifically to enhance the capabilities of the State Police Bomb Squad.	Equipment
	2008	Bomb Squad Set-Aside		\$ 125,000.00		
	2009	Bomb Squad Set-Aside		\$ 34,759.00		
	2010	Bomb Squad Set-Aside		\$ 38,000.00		
	2006	Port Security Grant Program	10/01/06 - 09/30/09	\$ 863,646.00	To enhance the capabilities of the Unit to respond safely and in a timely manner to detect and safely render an Improvised Explosive Device (IED) or Weapon of Mass Destruction (WMD) on the Ferry's or in the Ports of New Haven, New London or Bridgeport.	Equipment, training, supplies, equipment maintenance
	2008	Critical Infrastructure Protection - Port Security Grant Program	3/25/11 - 12/31/12	\$ 210,000.00		
	2009	ARRA Port Security Grant Program	09/01/09 - 08/31/12	\$ 420,000.00		
	2010	Port Security Grant Program	11/26/11 - 05/01/13	\$ 640,000.00		

	2012	Port Security Grant Program	9/1/12 - 8/31/14	\$ 529,000.00		
	2009	Transit Security Grant Program - Canine Explosive Detection Team	11/15/10 - 5/31/13	\$ 1,863,382.60	To create and administer a Mass Transit Canine Team which provides security on CT's Mass Transit System	Personnel costs, equipment, supplies, training
Information Technology	2009	COPS Technology Program	3/11/2009 - 09/10/12	\$ 800,000.00	To add a Programmable Matching Accelerator (PMA) to our Automated Fingerprint Identification System (AFIS). This will allow for faster responses to personnel booking a prisoner utilizing a Live Scan Device and will enable the agency to allow more latent fingerprint examining devices utilize the system at local police departments and for the use of Mobile ID devices.	Equipment, supplies
Information Technology	2010	COPS Technology Program	12/16/09 - 12/15/12	\$ 175,000.00	To purchase mobile video recording systems	Equipment, Supplies
OAS Administration	2005	COPS Technology Program	12/08/04 - 12/07/12	\$ 986,644.00	To enhance the Agency's technology capabilities	Equipment, training, supplies, contractual costs
	2008	State Homeland Security Grant Program	11/1/09 - 7/31/12	\$ 221,370.00	To enhance the Division's ability to detect and respond to a homeland security incident.	Equipment, training, supplies
	2009	State Homeland Security Grant Program	11/1/10 - 11/30/12	\$ 222,456.00		
Sex Offender Registry Unit	2011	SNORA Project	10/01/10 - 09/31/12	\$ 222,748.00	To be in compliance with SORNA requirements, and to prepare the Connecticut Sex Offender Registry in its' implementation of these requirements.	Personnel costs, equipment, supplies
	2012	SORNA Project	10/1/2012 - 09/30/14	\$ 376,892.00		

Telecommunications	2010	Buffer Zone Protection	1/26/11 - 01/05/13	\$ 291,943.65	To purchase telecommunication equipment for Casino Units	Equipment
	2007	Public Safety Interoperable Communications Grant	01/01/08 - 03/31/11	\$ 6,732,960.00	To enhance the DESPP Communication System	Equipment
Traffic Services Unit		ARRA Local Pass Through Waiver Funds for Equipment	04/15/10 - 06/31/11	\$ 127,400.00	To obtain 44 speed measuring instruments for traffic speed enforcement in the communities of Ashford, Bozrah, Canaan, Cornwall, Goshen, Lisbon, Putnam, Scotland, Sharon, Thompson, Union, Voluntown, Windham and Woodstock.	Equipment
	2009	Aggressive Driving Enforcement Program I-95 Corridor	10/01/08 - 09/30/09	\$ 152,000.00	To enhance the Traffic Units ability to enforce traffic related issues and enforcement	Personnel costs, supplies, training, equipment
	2010	Aggressive Driving Enforcement Program I-95 Corridor	11/23/09 - 09/30/10	\$ 142,000.00		
	2009	Comprehensive Safety and Speed Compliance	10/01/08 - 09/30/09	\$ 380,400.00		
	2010	Comprehensive Safety & Speed Compliance Enforcement Project	11/23/09 - 09/30/10	\$ 400,000.00		
	2011	Comprehensive Safety & Speed Compliance Enforcement Project	11/19/10 - 09/30/11	\$ 406,500.00		
	2012	Comprehensive Safety & Speed Compliance Enforcement Project	12/1/11 - 09/30/12	\$ 200,000.00		
	2013	Comprehensive Safety & Speed Compliance Enforcement Project	12/21/12 - 09/30/13	\$ 99,300.00		
	2009	CSP Occupant Protection Program	10/01/08 - 09/30/09	\$ 97,000.00		

2010	CSP Occupant Protection Enforcement Project	10/01/09 - 09/30/10	\$ 100,000.00
2011	CSP Occupant Protection Enforcement Project	10/25/10 - 07/01/11	\$ 100,000.00
2012	CSP Occupant Protection Enforcement Project	11/14/11 - 06/15/12	\$ 80,000.00
2013	CSP Occupant Protection Enforcement Project	12/01/12 - 06/13/13	\$ 100,000.00
2010	Distracted Driver Reduction Safety Initiative	04/01/10 - 09/30/11	\$ 44,500.00
2011	Distracted Driver Reduction Safety Initiative	04/01/10 - 09/30/11	\$ 44,500.00
2009	Expanded DUI Enforcement Project	10/01/08 - 09/30/09	\$ 335,000.00
2010	Expanded DUI Enforcement Project	10/01/09 - 09/30/10	\$ 300,000.00
2011	Expanded DUI Enforcement Project	11/22/10 - 09/30/11	\$ 380,000.00
2012	Expanded DUI Enforcement Project	11/1/11 - 09/12/12	\$ 380,000.00
2013	Expanded DUI Enforcement Project	12/21/12 - 09/30/13	\$ 562,500.00
2009	Public Safety Awareness & Outreach Project	10/01/08 - 09/30/09	\$ 25,000.00
2010	Public Safety Awareness and Outreach Project	11/23/09 - 09/12/10	\$ 37,000.00
2011	Public Safety Awareness And Outreach Program	02/25/11 - 09/30/11	\$ 32,000.00
2012	Public Safety Awareness And Outreach Program	11/15/11 - 09/30/12	\$ 39,500.00
2013	Public Safety Awareness and Outreach Project	11/15/12 - 09/30/13	\$ 45,000.00
2009	Convincer Rollover Simulator Project	10/01/08 - 09/30/09	\$ 125,000.00

	2010	Safety Belt Convincer/Rollover Simulator Project	10/01/09 - 09/30/10	\$ 125,000.00		
	2011	Safety Belt Convincer/Rollover Simulator Project	10/01/10 - 09/30/11	\$ 130,000.00		
	2012	Safety Belt Convincer/Rollover Simulator Project	10/1/2011 - 09/30/12	\$ 145,500.00		
	2013	Safety Belt Convincer/Rollover Simulator Project	10/01/12 - 09/30/13	\$ 150,000.00		
	2009	UCONN Spring Weekend DUI Enforcement Project	10/01/08-09/30/09	\$ 53,600.00		
	2011	UCONN Spring Weekend Enforcement Project	04/01/11 - 04/30/11	\$ 57,816.00		
Troop B	2009	Buffer Zone Grant Program - Resident Trooper Initiative	09/07/12 - 09/30/12	\$ 35,884.00	Generator for Resident Trooper Office, Equipment	Equipment
<i>Open Grant Awards Total</i>				\$ 25,286,156		